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The Century of Columbus

BY

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To The Knights of Columbus

for whom the material here presented in book form was originally gathered for lectures in many parts of the country and whose hearty interest in the dissemination of historical truth has encouraged its completion, this book is fraternally and respectfully dedicated by the author.

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"There come from time to time, eras of more favorable conditions, in which the thoughts of men draw nearer together than is their wont, and the many interests of the intellectual world combine in one complete type of general culture. The fifteenth century . . . is one of these happier eras; and what is sometimes said of the age of Pericles is true of that of Lorenzo—it is an age productive of personalities, many-sided, centralized, complete. Here, artists and philosophers and those whom the action of the world has elevated and made keen, do not live in isolation, but breathe a common air, and catch light and heat from each other's thoughts. There is a spirit of general elevation and enlightenment in which all alike communicate. . . . That solemn fifteenth century can hardly be studied too much, not merely for its positive results in the things of the intellect and the imagination, its concrete works of art, its special and prominent personalities, with their profound æsthetic charm, but for its general spirit and character, for the ethical qualities of which it is a consummate type."

WALTER PATER, *The Renaissance.*

PREFACE

In a previous book, " The Thirteenth Greatest of Centuries," I described the period of human activity in which, as it appears to me, more was accomplished that is of significance in the expression of what is best in man and for the development of humanity than during any corresponding period of the world's history. To many people it may now seem that I am setting up a rival to the Thirteenth Century in what is here called The Century of Columbus, the period from 1450 to 1550. I may as a foreword say, then, that there is no thought of that and that I still feel quite sure that the Thirteenth is the Greatest of Centuries, though it must be admitted that probably more supremely great men were at work in Columbus' Century than in the preceding period. The Thirteenth Century is greatest, however, because its achievements were more widely diffused in their influence and because more of mankind had the opportunity and the incentive to bring out the highest that was in them, than at any other period in the world's history. As a consequence a greater proportion of mankind was happy than ever before or since, for happiness comes only with the consciousness of good work done and the satisfaction of personal achievement. And that is the greatest period of human history when man is the happiest.

The Renaissance, however, for it is practically the period in history usually known by that name which is here called the Century of Columbus, achieved results in every mode of human endeavor that have been inspiring models for all succeeding generations, most of all our own. Just why greatness in human achievement should thus occur in periods long separated from each other is hard to understand. I have sometimes suggested that there is probably a biological law in the matter, the factors of which are not well understood as yet. Every third or fourth year the farmer expects to have an apple or fruit year, as it is called—that is, to reap a fine fruit harvest, the fruit product of the intervening years having often been quite indifferent. Man is much more complex than the fruits and so it takes a longer interval to prepare a great human harvest, hence humanity has its supreme fruitage only every third or fourth century. Undoubtedly Columbus' Century is one of the finest fruit periods of human history.

There was nothing that the men of the time did not do supremely well, and a great many of them did nearly everything that they took in hand better than any of their successors. As a curious contrast to our time, very few of them limited themselves to any one mode of expression. Because of its very contradiction of a great many of our prevalent impressions, as for instance the universal persuasion of constant human evolution and the supposed progress of mankind from year to year but surely from century to century, and the thought so common, that after all we must now be far ahead of the past,—though there is abundant evidence of the vanity of this self-complacency—the story of Columbus' Century should be interesting to our generation. Since it furnishes the background of history on which alone the real significance of the discovery of our continent just after the end of the Middle Ages can be properly seen, it should have a special appeal to Americans. These are the reasons for writing the book.

Owing to the large field that is covered, the author can scarcely hope to have escaped errors of detail. His only thought is that the broad view of the whole range of achievement may be sufficiently helpful to those interested in the history of human culture to compensate for faults that were almost inevitable. Its comprehensiveness may give the book a suggestive and retrospective value. It is addressed not to the special student but to the general reader interested in all phases of human accomplishment who wishes to fill in the outlines of political history with the story of the intellectual and ethical life of a great epoch. Thanks are due to Mr. Stephen Horgan for material aid in the selection of illustrations, no easy task because of the immense material to choose from. A definite effort has been made to avoid the well-known masterpieces and have the illustrations add to the knowledge of the time.

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The discovery of America but one of a series of notable achievements in Columbus' time. His century, 1450 to 1550, had more great men than any other in human history. In the arts it is unsurpassed. In its deeds it rivals every other century, above all in social work, in scholarship, in education and in its achievements in the sciences, physical as well as biological, and in medicine and surgery. Its literature is behind that of certain other periods of history, ~~but~~ this is the age of Leo X and one of the most interesting epochs of world literature in every European country xxv

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INTRODUCTION

To many people the date of the discovery of America must seem somewhat out of place. At least it must be hard for them to understand just how it came about that before the fifteenth century closed so great a discovery as this of a new continent could be made. The Middle Ages are usually said to end with the Fall of Constantinople (1453), though a number of historians in recent years have begun to date the close of mediæval history with the discovery of America itself. It scarcely seems consonant with the usually accepted ideas of widespread ignorance, lack of scientific curiosity with dearth of initiative and absence of great human interests during the Middle Ages, that so important an achievement as the discovery of America should have come at this time. In spite of the growing knowledge that has revealed the wonderful achievements of the mediæval period, there are still a great many people who think themselves well informed, for whom the thousand years from about 500 to 1500 seem almost a series of blank pages and it cannot but be very surprising to them that anyone should have been able to rise out of the slough of despond so far as regards human knowledge and enterprise which these times are often declared to represent, to the climax of energy and daring and conscious successful purpose required for the discovery of the Western Hemisphere. Apparently only a special dispensation of Providence preparing the modern time could possibly have brought this important discovery out of the Nazareth of the so-called "Dark Ages."

All sorts of explanations have been deemed necessary to account for Columbus' great discovery at this time. To some it has seemed to be the result of a happy accident by which one of the deeply original spirits among mankind, with the *wanderlust* in his soul, succeeded finally in having someone provide him with the opportunity for a long vague voyage on which fortunately the discovery of the Western Hemisphere was made. We hear much of happy accidents in scientific discoveries and they are supposed to represent the fortunate chances of humanity. It must not be forgotten, however, that only to genius do these happy accidents occur. Newton discovered the laws of gravitation after having seen the apple fall, but many billions of men had seen apples fall before his time without being led to the faintest hint of gravitation. Galvani touched the legs of a frog by accident with his metal implements while making electrical experiments, and so became " the frogs' dancing master " in the contemptuous phrase of many of his scientific colleagues and the father of biological electricity for us, but doubtless many others lacking his scientific insight had seen this phenomenon without having their attention particularly caught by it.

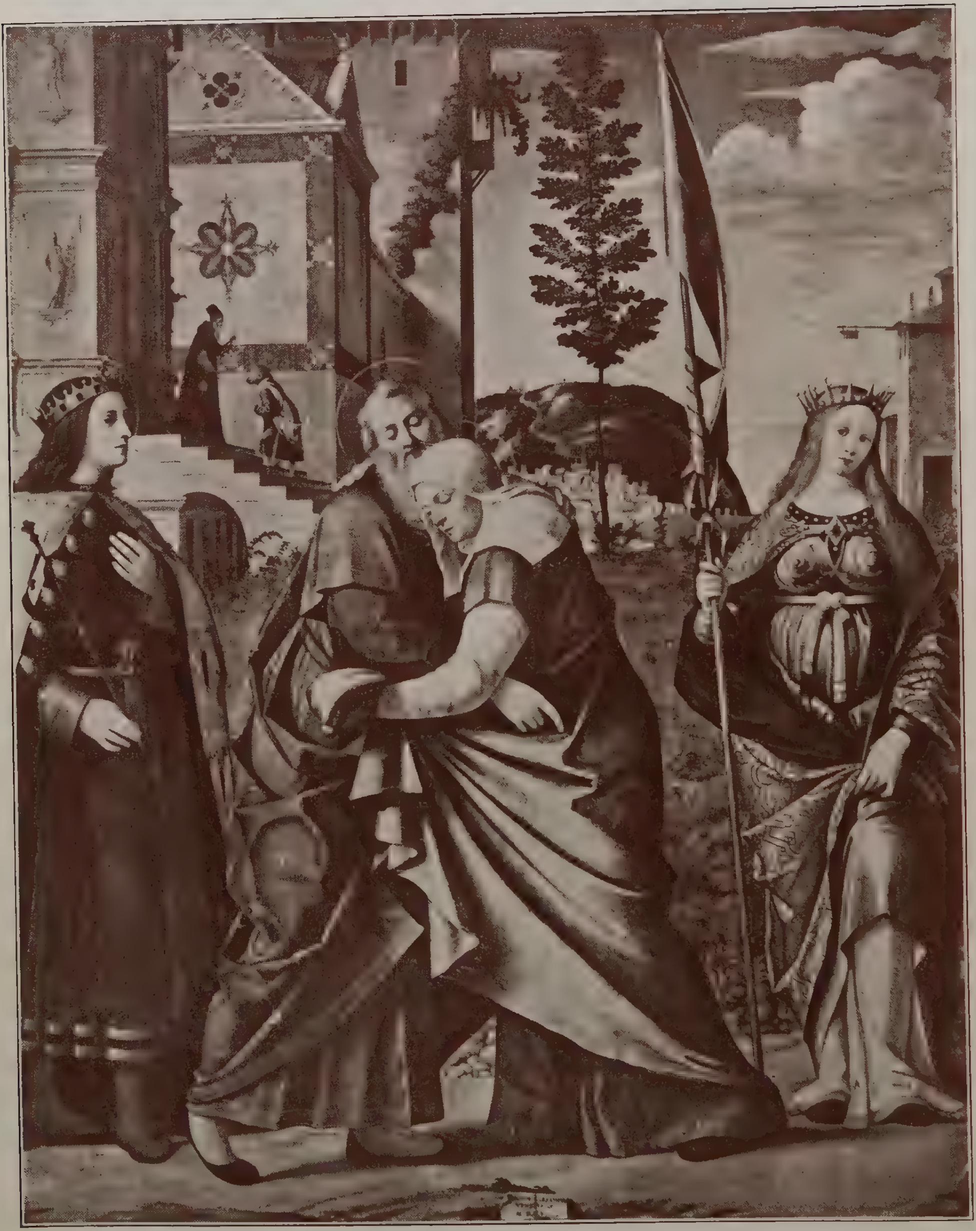
It has been suggested that not a little of the good fortune that resulted in the discovery of the American Continent was due to Columbus' obstinacy of character. He was a man who, having conceived an idea, was bound to carry it out, cost what it might. These are, of course, the men as a rule who make advances and discoveries and obtain privileges for us. They are not satisfied to be as others, and the world usually denominates them cranks. They insist on doing things differently and their vision of great achievement does not fade or become dim even under the clouds of objections that men are prone to rouse against anything, and, above all, any purpose that they themselves cannot understand. Columbus is said to have been one of those mortals who are actually urged on by obstacles and who cannot be made to back down from their purpose by rebuffs and refusals, or even by the disappointments after preliminary encouragement which are so much harder to bear. Columbus' steadfastness of character during the voyage, which enabled him to overcome the murmurings of his men and keep his ships to their course in spite of almost mutiny, is a reflex of this trait of his character, and yet there have been no end of obstinate men who have never succeeded in accomplishing anything worth while. Once engaged on the expedition, or in the preliminaries for it, Columbus' obstinacy of character in the better sense of that expression was simply invaluable, but the question is, How did he become engaged on the expedition at this time?

It takes only a little consideration of the history of the time in which Columbus was educated and the story of the accomplishment of the men who lived around him during the half century that preceded the discovery of America to realize exactly why the discovery was made at this particular time. There has probably never been a period when so many supremely great things were done or when so many men whose enduring accomplishment has influenced all the after generations were alive, as during the nearly seventy years of Columbus' lifetime. In order to illustrate, then, the background of the history of the discovery of America, it has seemed worth while to take what may be called Columbus' Century, from 1450 to 1550, and show what was accomplished during it. The discovery of America came just about the middle of it and represents one of a series of great achievements made by the men of the time which are destined never to lose in interest for mankind. To know the other great events and great men of the period is to appreciate better just what the discovery of America meant and the place that Columbus' work in this regard should have in the history of human accomplishment. The present volume can be at best only a very brief review of the great achievements and the story of the lives of the men of this time.

John Ruskin once said that the only proper way to know the true significance of a period of human history was to study the book of its arts, the book of its deeds and the book of its words, that is, to weigh the significance of its artistic accomplishment, the meaning of what its men did for their fellowmen and the worth of its literature in terms of world achievement. Judged by this standard, Columbus' Century must be placed among the greatest periods of human accomplishment in the world's history. It is the Renaissance period and, as everyone knows, this is a famous epoch in modern times. It has been a favorite study of a great many scholars in a great many generations since. It introduced many of the ideas, indeed most of the important thoughts and inventions on which our modern progress is founded. It is true that its great impetus came from the impulse given by the reintroduction of Greek ideas and Greek ideals into the modern world, but only that there were men of talent and genius, capable of being stirred to achievement by Greek incentive, nothing great would have been accomplished. Besides, while it owes much to Greece, it is great in its own right, and its men added much to what came to them out of Greece and adopted and adapted classic ideas and ideals so as to make them of great significance in the modern world.

As regards THE BOOK OF THE ARTS of Columbus' Century, scarcely more need be said in this introductory chapter than what has already been suggested, that this is the Renaissance period. All the world now knows of the art of the Renaissance and of all that was accomplished by men who lived during the century after the Fall of Constantinople in 1453. Every form of art, painting, sculpture, architecture, music, as well as the arts and crafts, achieved a supreme expression at this time. Everywhere, particularly in Italy, men started up as if a new life had come into the world and proceeded to the accomplishment of artistic results which had apparently been impossible to preceding generations, and, alas for the notion of human progress! have often been the despair of succeeding generations. If imitation is the sincerest flattery, then these artists of the Renaissance period have indeed been flattered, for it has almost been the rule in the after time to imitate them and even the greatest of the artists of succeeding generations have been deeply influenced by the work of these men and usually have been quite willing to confess how much they owe to them.

In Italy the list of names of painters who were at this time doing work which the world will never willingly let die, is long and glorious. There has never been a period of equal influence and achievement in this mode of art in the history of the race. Almost every city in Italy produced a group of painters during this century who would make a whole nation famous in any other period. The Florentine School surpasses all the others in importance, and such names as Fra Angelico, Benozzo Gozzoli, Fra Bartolommeo, Lippo Lippi and Filippino Lippi, Botticelli, Ghirlandaio, Leonardo da Vinci, Andrea del Sarto, Masaccio and Michelangelo, occur in its history. Venice produced in the first half of our period such men as



CARPACCIO, MEETING OF STS. JOACHIM AND ANNA the Vivarinis, the Bellinis, Titian, Carpaccio, Palma Vecchio, Giorgione and Lorenzo Lotti, worthy predecessors of the great names that were to come in the second half—Tintoretto and Paolo Veronese. The Umbrian School of painters includes a group of men born in the hill towns of Umbria, to be credited, therefore, to more than a single city, but their greatness is sufficient for the glory of any number of cities,—Gentile da Fabriano, Bonfigli, Perugino and his pupils, Pinturicchio, Lo Spagna, and many others, above all Raphael. Bologna possessed the three Caracci, Guido, Domenichino and Guercino. Parma had Correggio, Ferrara, Dosso Dossi and Garofalo; Padua, Andrea Mantegna and his master, Squarcione, and Rome, the pupils of Raphael, Giulio Romano, Sassoferato and Carlo Maratta and Da Imola. These schools of Italian painting embrace all the modes of expression with the brush in their scope.

The other countries of Europe, however, were not without distinguished representatives of the wondrous art spirit of the time. In Germany, there were Albrecht Dürer and the Holbeins, in the Lowlands the Van Eycks' greatest work came just before the opening of the century and inspired Memling, Van der Weyden, Quentin Matsys and others. In Spain, such men as Zurbaran and Ribalta were worthy forerunners of the great geniuses Velasquez and Murillo, who represent the aftermath of the glorious harvest of the workers in the field of art during this Renaissance period. They were all willing to confess their obligations to the great painters of the preceding age and their work is really a continuation of that Renaissance spirit. The accomplishment of the painters of Columbus' period proved as copious in stimulus for subsequent painters as the great navigators' discovery of America proved the stimulus to explorers, discoverers and empire makers during the subsequent century. A great wind of the spirit was blowing abroad and men were deeply affected by it, and accomplished results almost undreamt of before, and even when the wind of the spirit was dying down it still moved men to achievements that had only been surpassed during the immediately preceding period and that were to be looked up to with admiration and envy and given that sincerest of praise, imitation, during all the succeeding centuries.

The artists of Columbus Century, this great Renaissance period, were never merely artists. Some of them, like Michelangelo and Leonardo da Vinci, though among the greatest painters in the world, preferred to think of themselves as something else than painters. Leonardo has painted the greatest of portraits, but was a great engineer, an architect, an inventor, a scientist, and anything else that he cared to turn his hand to. Michelangelo was undoubtedly a great painter, yet this was the least of his accomplishments, for he was greater as an architect, a sculptor, and perhaps even as a poet, than he was as a painter. Raphael, besides being a painter, was an architect and above all an archæologist. It was a sad loss to classic archæology that he did not live to accomplish his plan of making a model of old Rome. He was a great student of the technics of his art and if he had not died at the early age of thirty-seven would surely have accomplished much besides painting. Many of the painters and sculptors of the time had been goldsmiths or workers in metal, and nearly all of them were handicraftsmen, handy with their hands and capable of doing things. Practically all of them were architects and many of them proved their powers in this regard. A man of the Renaissance always thought that he could do anything well, and specialism was the last thing in the world thought of. Their confidence in their own powers gave them a wonderful breadth of ability to accomplish.

In sculpture the roll of great names is scarcely less wonderful than that of the great painters. It includes such men as Verrocchio and Leopardi, Donatello, Leonardo da Vinci, Michelangelo, the Della Robbias, Benvenuto Cellini and many others of less fame in this great period, but who would have been looked up to as wonder workers in the art at any other time. The sculpture work, for instance, that was accomplished in connection with Certosa at Pavia, though out of harmony with some of the true aims of sculpture, shows how beautifully Renaissance men worked out artistic ideas of any kind. Glorious as is the list of sculptors in Italy, other countries are by no means eclipsed by Italian pre-eminence. The work of the great sculptors of Nuremberg, Adam Kraft and Peter Vischer, as well as of the coterie of sculptors who did the wonderful group of heroes at Innsbrück, show how the wind of the spirit of genius in art was blowing abroad everywhere. In the Low Countries, while we do not always know the names of the sculptors, their beautiful monuments are with us. Such beautiful work as the Tomb of Mary of Burgundy, made by Peter Beckere of Brussels, is an enduring memorial of artistic excellence. There are wood carvings everywhere through the Low Countries that display the artistic genius of the time, In France, Colombe, trained in Flanders, did beautiful work, and Jean Juste and his son have left a monument of their sculptural genius in the Cathedral at Tours. Jean Fouchet made the lovely tomb of Agnes Sorel at Loches, and after the spirit of the Renaissance had come to France, Jean Goujon and Germain Pilon achieved their masterpieces. The reliefs of Jean Goujon for the " Fountain of the Innocents " are very well known and often to be seen in copies. The " Three Graces " of Germain Pilon, though already there is perhaps some sign of decadence, is a charming work of art that has never been excelled in the more modern time.

In architecture, Columbus' Century is, if anything, more famous than for its accomplishment in other arts. Almost every city in Italy has a distinguished architect who has left behind him a monument of genius. Brunelleschi died just before the century; Bramante, Alberti, Leonardo da Vinci, and above all, Michelangelo, are the great names of the time. Such other names as Palladio, Sangallo, della Porta, Sansovino and San Michele come after these, and the work of this group of men has more influenced succeeding generations than any other. The monuments of this time include the Cathedral of Santa Croce at Florence, St. Peter's at Rome and many of the great palaces and hospitals that now are the subject of so much admiration and attention from scholarly visitors to Italy. In our own time the reproduction of Renaissance architectural types and the careful study of what the Italian Renaissance did in modifying for modern use classic types of architecture has done more to give us handsome monumental buildings than any other inspiration that men have had. Unfortunately, the Renaissance in its adoration of classic types and ideals developed a contempt for the older Gothic architecture that had many sad effects on taste in art, but the people of the period succeeded in building a glorious monument to themselves for all time.

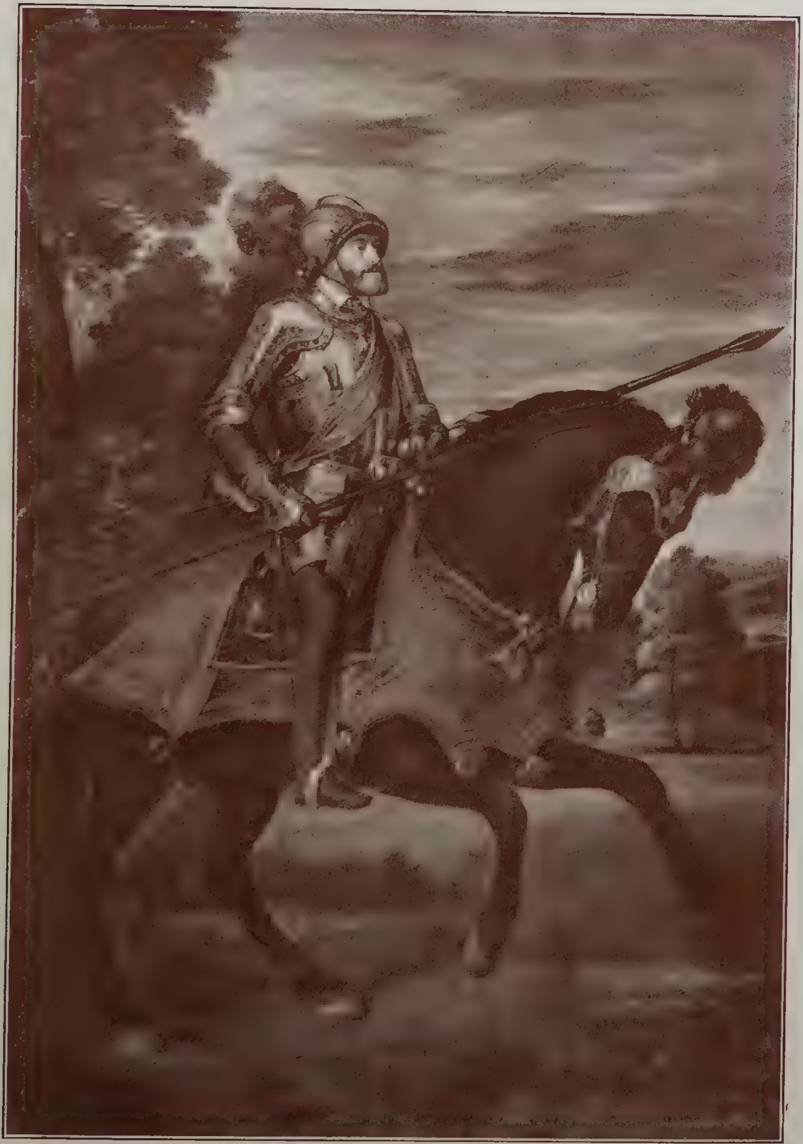
This same century saw the rise and marvellous development of music in nearly every department of that art and in a way that strikingly illustrates how the genius of this time gave to men a power of lofty expression in every æsthetic mode. In this form of art Italy was not as in other departments of æsthetics the leader, though she proved the apt pupil, excelling before the close of the period even her masters. It is to the Flemings that we owe the great beginnings of music at this time, as we also owe to them and to their brethren of Holland so much in all the arts. Ockenheim of Hainault and his pupils, above all Josquin, developed the technique of polyphonic music, and Flanders furnished music masters for every important capital in Europe. Claude Goudimel, born at Avignon, but educated in Flanders, opened his famous school of music in Rome in the first half of the sixteenth century, and while not perhaps, as has often been said, the teacher of Palestrina, he helped to create the Roman school in which developed the brothers Animuccia and the brothers Nanini. Orlando de Lasso did his work at this time, and Stefano Vanneo of Recanati published his treatise on counterpoint in 1531. The use of the chord of the dominant seventh was invented and St. Philip Neri encouraged those religious musical exercises which culminated first in the Oratorio and subsequently in what we know as opera.

As always happens in a really great artistic period, there was a magnificent development of the crafts as well as of the arts. When such men as Verrocchio, probably even Leonardo da Vinci himself, Pollaiuolo and Benvenuto Cellini were looked upon as goldsmiths as well as sculptors, it is easy to understand how thoroughly artistic was the goldsmithery of the time. As a matter of fact, most of the artists of the Renaissance were trained in workshops. These were not only technical schools, but art schools of the finest kind. As a consequence not only in gold and metal work, but in every other craft, art impulses of lofty achievement are noted. The stained glass of the time is among the most beautiful ever made. All glass-making and porcelain reached a high plane of perfection. It is interesting to note the decadence of fine glass-making that begins toward the end of our period. Gem-cutting reached a climax of perfection at this time that has ranked Renaissance gems among the most precious in the world. The art of the medal and the medallion was another artistic specialty of this time in which it has probably never been excelled and very seldom equalled. In book-making artistic craftsmanship surpassed itself. Before the development of printing as the exclusive mode of making books there was a marvellous evolution of illuminated hand-made books. Many specimens still extant are among the most beautiful in the world. With these as models the printed books came to be just as wonderful artistic products and so we have during Columbus' period the finest book-making that the world has ever known. Every portion of the book, the print, the spacing, the paper, the binding was artistically done. What seemed a mere handicraft was lifted to the plane of art and whenever in the aftertime—and never more so than in our own period—men have wanted models for beautiful book-making they have gone back to those produced during this period.

THE BOOK OF THE DEEDS of the century will be best appreciated from the names of the doers, the men of action, of this wonderful time. History was indeed making. What came with the rise of the Portuguese empire mainly through the influence of Prince Henry and of the Spanish Empire in America under Ferdinand and Isabella were only the great beginnings of the wealth and power Europe was to draw from over-sea colonies. Unfortunately the century was a period of political unrest. The seething spirit that led to great achievement in every department gave rise to many wars and disturbances. The Wars of The Roses in England and the many wars in Italy, with the political disaffection in Germany and the disturbed state of France, made human life very cheap just when it was capable of most enduring accomplishment. Great monarchs like the Emperor Charles V, Francis I, king of France, and Henry VIII of England worked good and harm in proportions very hard to estimate properly. There was never a more tyrannical king than Henry VIII and probably never a less just one than Francis I. Bishop Stubbs, the English constitutional historian, has claimed for Charles V the right to the title great, yet there is so much that is at least questionable about his career as a ruler that history will probably never willingly accord it. The military exploits, the courtly intrigues, the corrupt diplomacy, the exhibition of the ugliest traits of mankind were all emphasized in this period because great men are great also in the ill they do, but fortunately there is another side to the book of the deeds of the century worth while reading.

Among the events of the century are the great Battle of Pavia at which Francis I of France was defeated so thoroughly that afterwards, while confined in the Certosa, he sent the famous despatch to his mother, " All is lost save honor." This century saw also the famous meeting of the Field of the Cloth of Gold at which both English and French nobles went so gaily attired and with so many handsome changes of raiment that literally not a few of them " carried their castles on their backs." Their subsequent bankruptcy strengthened the hands of the crown in both countries. This unfortunately did more than anything else to lay the foundations of that absolutism which needed the French Revolution and its successors in other countries of the past century to break up. It was the time of the famous Diet of Worms and of all the political and religious disturbances which have been called the Reformation, though in recent years historians have come to recognize the movement not as a great epoch-making reform in religion, of which it brought about the disintegration by its doctrine of individual judgment, but as a religious revolt affecting the Northern nations of Europe, disturbing the continuity of the traditions of culture and education and art which had been so completely under the influence of the old Church and which among these Northern nations were not caught up again for several centuries after this unfortunate division in Christianity.

The greatest accomplishment of this period, however, was its scholarship. In every country in Europe men devoted



TITIAN, EMPEROR CHARLES V.

themselves to the study of the Latin and Greek classics and opportunities for education of the highest import were accorded everywhere. They were no merely dry-as-dust scholars, and the names of such men as Æneas Sylvius Piccolomini, who was afterwards Pope Pius II; of Aldus Manutius, the great Venetian printer; of Leon Battista Alberti, famous not only as a scholar, but as an architect and an artist in every mode, and Lorenzo de' Medici himself, are only brilliant examples in a single country of a scholarship that was eminently productive and influential. In every country in Europe the story is the same. At the beginning of this book it seemed that the scholarship of the century might be summed up in a single chapter. I found that even a single chapter for Italy was quite inadequate and that the Teutonic countries of themselves required another chapter even for a quite incomplete record of their scholarly achievements. Rudolph Agricola; Reuchlin, who was known as "the three-tongued wonder" of Germany; Desiderius Erasmus, the most influential scholar of Europe in this intellectual period; Jacob Wimpfeling, the schoolmaster of Germany; Melanchthon, the gentle *præceptor Germaniæ,* and all the products of the schools of the Brethren of the Common Life serve to demonstrate the greatness of the German scholarship of this period. In England there are such men as Bishop Selling, Cardinal Morton, Archbishop Warham, Dean Colet, Thomas Linacre, Dr. John Caius, Roger Ascham, Thomas More and many others who in any other period would be reckoned among the distinguished scholars.

And yet the other Latin countries did not lag much behind Italy and were fair rivals of the Teutonic countries in scholarship at this time. Queen Isabella herself learned Latin when she was already a queen on the throne. Court fashions are sure to spread and this did. Besides the queen encouraged Cardinal Ximenes in the production of that magnificent monument of scholarship the Complutensian Polyglot Bible. The development of the universities in Spain only parallels the corresponding movement in the rest of Europe, but there were probably more higher institutions of learning founded and above all more refounded and re-established on a broader basis at this time than at any other corresponding period of history. In France the index of scholarly accomplishment is the foundation of the Collège de France, which was to mean so much for French intellectual life. It made it possible for scholars to pursue their work unhampered by the fossilized University of Paris, which had become cramped in old-fashioned ways and for the time being was incapable of doing great intellectual work itself and yet, owing to the charters and privileges granted it in its flourishing period, was still capable of crushing out the true spirit of knowledge and preventing real development.

There was never a time in the world's history when scholarship, in so far as that term means knowledge of the great books of the past, occupied so prominent a place in men's minds or had so much influence. Nor has there ever been a time when so many of those in power felt that the very best thing that they could do for their people as well as for their own fame was the encouragement of learning. Scholars were more highly honored than at any period in the world's history. Even ruling princes and the higher nobility felt that they owed it to themselves to be acquainted with the great works of literature or pretend at least to a knowledge of them and that a portion of their policy must be to patronize teachers and scholars of the New Learning. To be a patron of scholars was considered quite as important as to act in a similar capacity for painters, sculptors and architects, though there might be more personal fame attached to securing the works of the great masters in art. Fortunately these scholars were encouraged in their labors, and we have a whole series of wonderful editions of the old classics accomplished at a cost of time and labor and patience that only a few of those who have labored at such work under ever so much more favorable circumstances can properly appreciate. Their editions were issued as beautiful books in this wonderful time, and so they have remained as precious treasures for us down to our own day.

The achievements in art and scholarship in this century are well known and universally recognized. It is seldom appreciated, however, that the century is almost as great in its wonderful progress in science as it is in any other intellectual department. The foundations of our modern sciences were laid broad and deep at this time, and achievements of scientific generalization as well as accurate and detailed observation were made, that may be placed with confidence in comparison with those of any other time in the world's history, even our own. Copernicus' theory probably revolutionized men's thinking more with regard to the earth and the universe of which it forms a part than the thought of any man has ever done during the whole history of mankind. The great medical scientists of this period almost as effectually revolutionized men's thinking with regard to the constitution of men and animals as Copernicus had done with regard to the universe. Vesalius, called the father of modern anatomy, has left us a monument of genius in his work on the structure of the human body, and his famous contemporaries, Eustachius, another Columbus, the anatomist, and Cæsalpinus as well as Servetus added to the knowledge of anatomy and physiology which Vesalius had so well begun. Servetus and Columbus described the circulation of the blood in the lungs about the same time; and shortly after the close of our period Cæsalpinus, trained in the schools of this time, described the circulation of the blood in the body.

In every department of biological science, in anatomy and physiology, in pathology, in botany, in zoology, in palæontology, in ethnology and linguistics, in anthropology, noteworthy advances were made. Magnificent applications of the knowledge acquired were made for the benefit of man and animals, new plants for medicine were sought in distant countries and a great new development of medicine took place. None of the anatomists and physiologists of the time failed to use their knowledge for the increase of information with regard to disease and its treatment. Vesalius besides being a great anatomist was almost as great a pathologist and one of the epoch-making diagnosticians of medical history. He was the first since the Greeks to describe an aneurism, that is the pathological dilatation of an artery through disease or accident, and the first in the history of medicine to demonstrate the presence of such a condition on the living subject. Paracelsus, Ambroise Paré, Linacre, John Caius and a whole host of great teachers in Italy are names to conjure with in the history of medicine and of surgery. There is probably no period in the world's history that has so many names famous in medicine that the world will never willingly let die.

The supremely great accomplishments of this time however, the true, good and great deeds of the century, were what it did for men. This is the period when there was more organization for social help and uplift than at any other period that we know. Every social need was responded to by the guilds. There were old-age pensions, disability wages, insurance against fire, accident at sea, burglary, highway robbery, the destruction of crops, the death of animals and all the other developments of mutual protection against the unexpected which we have been inclined to think were developments of our time. There were 30,000 guilds in England, it is said, when they were suppressed by Henry VIII, and the money in the treasuries, many millions of pounds, confiscated on the plea that they were religious organizations. They maintained grammar schools, had burses at the universities, arranged for technical training and apprenticeships, cared for orphans, provided entertainments for the people of the town, brought the membership together in friendly meetings and banquets several times each year, held athletic contests, encouraged social life and innocent amusements in every way and represented an ever vital nucleus of fraternal interest among men. Our chapter on this shows too how seriously the moneyed men of the time took their duty of philanthropic care for their townsmen by various institutions.

A period that did so much for social needs could scarcely be expected to have neglected its hospitals and as a matter of fact some of the most beautiful hospitals in the world were built in this period, and everywhere that a hospital was built it was worthy of its purpose. The hospitals of a later time, especially the eighteenth and nineteenth centuries, were little better than jails and were eminently unsuitable. At this time citizens, instead of thinking that anything was good enough for the ailing poor, felt that the honor of the city was concerned, and the hospital, being a municipal building, was constructed with as much care for its beauty externally and its utility internally as the famous town halls or churches of the time. We know how well patients were cared for, since we have abundant evidence of the clinical teaching of medicine at the bedside. Whenever hospitals are well built and the attendant physician takes students with him on his rounds, the best possible treatment of patients is assured. They cared finely for the insane also and for the weak-minded. The awful abuses in this regard that came in the eighteenth century, and from which our own happier though far from satisfactory conditions represent a reaction, were a lamentable, almost incomprehensible degeneration from the magnificent work of the earlier time.

The women of Columbus' Century are worthy in every way of a place beside the men of their time. Those who in recent years have talked of the nineteenth century as the first period in the world's history when women secured an opportunity for the higher education forget amazingly many phases of feminine education of the long ago. The University of Salerno had its department of women's diseases in the charge of women professors in the twelfth century. There were feminine professors at the University of Bologna in the thirteenth century, and as a matter of fact in no century since the twelfth has Italy been without distinguished women professors at one or more of the Italian universities.

Above all those who talk of feminine education as a recent evolution must be strangely forgetful of the women of the Renaissance. In Italy, in France, in Spain, in Germany, in England, there were long series of distinguished women, some noted for their scholarship, some for their artistic taste, some for their literary power, all of them for a fine influence on the men of the time and an inspiration to what was best. Much of the wonderful social history of the time is due to them, but there is no department of intellectual or moral uplift in which their names are not prominent. Vittoria Colonna, the D'Estes, the women of the House of Medici, the Gonzagas in Italy, Queen Anne of Bretagne and Marguerite of Navarre in France, Queen Isabella of Castile, Queen Catherine of England, Margaret More, Mary Queen of Scots, Margaret of Bourgogne, Lady Jane Grey, Queen Elizabeth—when was there ever such a galaxy of learned women alive during the same hundred years? Besides these known in secular literature there was St. Angela of Merici, the great founder of the Ursulines; St. Catherine of Genoa, the wonderful organizer of charity; St. Teresa, probably the greatest intellectual woman who ever lived, and other women distinguished for supreme qualities of mind and heart almost too numerous to mention.

The hardest chapters of the book to compress have been those on Feminine Education and The Women of the Century. What they did to make their homes beautiful and their home surroundings charming, how they inspired the artists of the time, what they did to bring out the best that was in them, this indeed makes a difficult story to tell in a few pages. Their contributions to the intellectual treasure of mankind were not very large and only two or three of them have a name that will endure in literature and none of them in art, but what they accomplished for the ethical progress of the race at a particularly dangerous time when the study of pagan authors and of Grecian art had relaxed the fibre of Christian morality, represents a triumph of feminine accomplishment of which too much cannot be said in praise.

The Book of the Words of the century forms the least important chapter of the accomplishment of the time, and as compared with the arts and the deeds its literature seems almost disappointing, yet it must not be forgotten that this was the Age of Leo X, of which Saintsbury in " The Earlier Renaissance," in his series of Periods of European Literature, says, " Of few epochs is it more difficult to speak in brief space than of this century." He adds that " the age of Leo X was for no small length of time and under many changes of prevailing literary taste extolled as one of the greatest ages of literature, as perhaps the greatest age of modern literature." It fell from this high estate about a century ago, but the reaction against it was, as always is the case with reactions, exaggerated, and we are gradually growing in the appreciation of the greatness of the literature of the time again. We now know that there are very few periods that have contributed so much that is really of enduring value to world literature as this age of Leo X.

The Latin literature alone of this century would be enough to assure it a place as one of the wonderful productive periods in world letters. The "Imitation of Christ" was not written during the century, though its author seems to have put it into the ultimate form in which we now know it about the beginning of our period. It was during this time that it came to be recognized as a great source of consolation, a marvellous study of the human heart in time of trial and of triumph and the most influential book that had ever come from the hand of man. We have gathered together a small sheaf of the tributes that have been paid to it by some of the serious thinkers in all generations since, but it would be easy to fill a volume with words of highest commendation. In the Latin literature of this period also must be counted Sir Thomas More's "Utopia," which has been read in every generation that has taken its social problems seriously ever since, and never more so than in our own time. It deserves a place in world literature beside Plato's "Republic," and it is far ahead of any of the attempts at the description of a socialized state made in our time. For scholars at least Erasmus' writings represent an enduring contribution to Latin literature of the classic type, a storehouse of information with regard to the scholarship and also lack of scholarship of the time. For those interested in mystical subjects St. Ignatius' "Spiritual Exercises" is another of the Latin works of the period which, though it can scarcely be classed as literature, for, as we have said, Ignatius like Michelangelo wrote things rather than words, must take its place amid Columbian letters of lasting value since it is more used now than ever before.

There are not many surpassing works of vernacular literature from this time, and yet Machiavelli's history represents the only contribution to historical literature that takes a place in human interests beside the immortal trio of classical historians, Herodotus, Thucydides and Tacitus. Ariosto represents one of the favorite works of Italian scholars, and as the Italians have been the most cultured people in the world ever since, their critical judgment must be accepted as of great value. In popular literature the Tales of Chivalry, the Picaresque romances or tales of roguery and the almost endless number of Italian novels show how wide must have been the popular reading of the time. In France Villon has always been a favorite for all classes, and with Charles of Orleans he has been known by scholars at least outside of France and thoroughly appreciated. French modes of verse following the Italian came to influence the other countries of Europe at this time and have never ceased to supply ideas for the form of the less serious modes of poetry at least for all the generations down to our own. The influence of Clément Marot, of Brantôme and the Pleiades was felt in every literature of Europe, and has not completely disappeared even after the nearly four centuries that have elapsed since their time.

The literature of the century contains besides the names of Rabelais as well as Calvin in France, Baldassare Castiglione, Michelangelo, Vasari, Politian, Bembo, Lorenzo de' Medici, Pico della Mirandola and the learned ladies Vittoria Colonna, Margaret of Navarre, Lucretia Tornabuoni, the mother of Lorenzo de Medici, as well as the great scholars of the period in Italy. In Spain St. Teresa and the great mystical writers were compensating for the triviality and worse of the picaresque romances and the tales of chivalry. In Portugal the young genius of Camöens was nurtured, while in England Sir Thomas More was laying the foundations of modern English prose, the great Morality Plays, " Everyman " and the " Castle of Perseverance," were written, and the first fruits of English dramatic literature in its more modern form came in " Ralph Royster Doyster " and " Gammer Gurton's Needle." In Germany the literary product of the vernacular was less significant, but Luther's great popular hymns and his vernacular translation of the Scriptures gave a vigorous birth to modern German verse and prose, while Hans Sachs and the Minnesingers did as much for popular poetry. Few periods can present a literature so rich in every country, so varied, with so many enduring elements and with so much that remains as the constant possession of scholars ever since. The literature of the time may not equal its art or even its science, but no apologies are needed for it.

In a word, then, the books of the arts, the deeds and the words of Columbus' Century when read even a little carefully show us a marvellous period in which man's power of achievement was at its very highest. Its art in every department has never been excelled and has only been equalled by that of the Greeks, from whom, however, we possess no painting worthy of the name. Its intellectual achievements in scholarship and in science give it the leadership in education in the modern world at least. What it accomplished for men in great works of humanity represent a triumph of humanitarianism in the best sense of that word, and present achievements worthy to be emulated by the modern time. The book of its words is of less import, and yet there are not more than two or three periods in the world's history that have surpassed it and there are some modes of literature in which it is unexcelled. In the midst of this century the discovery of America instead of being a surprise cannot but seem the most natural thing in the world. Everywhere men were doing things that for many centuries men had been unable to do and they were achieving triumphs in every form of human effort. Given the fact that there was a large undiscovered portion of the world, it was more likely to be discovered at this time than at any other time in the world's history. That is the background of Columbus' Discovery of America, which anyone who wants to understand its place must know.

BOOK I

THE BOOK OF THE ARTS

CHAPTER I

GREAT PAINTERS: RAPHAEL

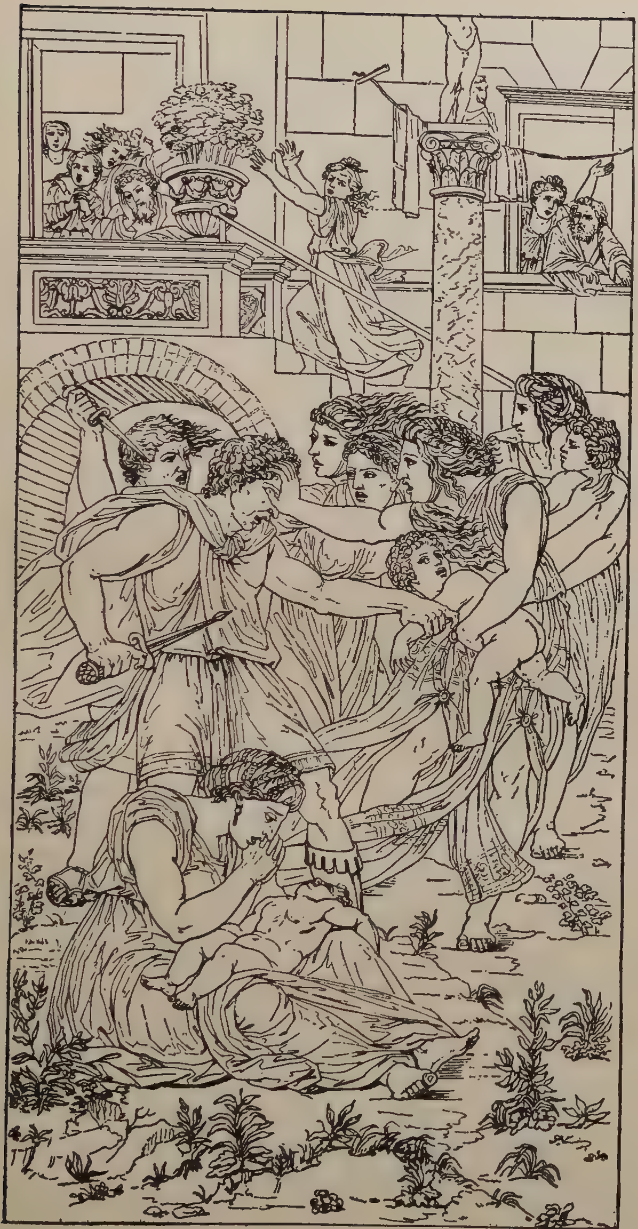
Any attempt at proper consideration of the book of the arts of Columbus' Century must begin with the three great names of Raphael, Leonardo da Vinci and Michelangelo. They are the greatest trio in the history of art—all their names associated with a single city at the beginning of their lives but deeply influencing the world of art before the end of them. Of the three as a painter Raphael is undoubtedly the greatest, though surely here, if anywhere in the history of art, comparisons are odious. Each of these geniuses in his own department of painting was supreme,—as a religious painter Raphael, as a portrait painter Leonardo, as a great decorative artist Michelangelo. Raphael rivals Leonardo, however, in the painting of portraits and some of Leonardo's religious paintings are almost the only ones worthy to be placed besides Raphael's great religious visions. Michelangelo, however, could on occasion, as he showed in the Sistine, prove a rival of either of them in this mode.

As is so true of the men of this time as a rule, all three of these men were much more than painters. Raphael died at the early age of thirty-seven, yet he reached distinction as an architect and as an archæologist, besides accomplishing his great painting. Leonardo insisted on not being thought of as a painter, but as an engineer and architect, though he has painted the greatest portrait ever made and beat Michelangelo once in a competition in sculpture. Michelangelo reached supremacy in all four of the greatest modes of art. He is a painter second to none in all that he attempted, he is the greatest sculptor since the time of the Greeks, he is one of the greatest architects of all time, yet with all this, by what might seem almost an impossible achievement, he was one of the greatest of poets and has written sonnets that only Dante and Shakespeare have equalled. These men of Columbus' Century not only were never narrow specialists but quite the contrary; they were extremely varied in their interests and felt in contradiction to what seems the prevalent impression in our time that such breadth of interest only increased their powers of expression in anything that they attempted.

Of the three probably Raphael has had the widest popular influence. His paintings have all unconsciously to most people colored and visualized for them the Biblical scenes, especially of the New Testament, and since his time painters have been greatly influenced by his compositions. He has deeply affected all the world of art and as for several centuries now some of his greatest works have been held outside of Italy, they have been producing their effect and giving artists the thought of how well deepest vision could be expressed.

This man, who by universal consent was the greatest painter that ever lived, was about nine years old when Columbus discovered America. According to tradition he died on his birthday at the age of thirty-seven in 1520. In less than two decades of active artist life he had painted a series of pictures that were a triumph even in that glorious period of marvellous artistic accomplishment. They have been the subject of loving study and affectionate admiration ever since. Many of them have been the despair of the artists who came after him. But Raphael is not an artists' artist in any exclusive sense of the word. He is as popular an idol with those who confess to having no critical knowledge of art as he is the hopeless model of those whose lives are devoted to art.

Unlike many a genius, though his family was poor his early years were surrounded by conditions all favorable for the development of his talents. Raphael is his baptismal name and his family name was Santi. (The name Sanzio often attributed to him has no warrant in history.) His father Giovanni Santi filled the post of art expert, so far as that office was formally constituted at that time, to Duke Frederick, reign-



RAPHAEL, DRAWING OF SLAUGHTER OF INNOCENTS
(TAPESTRY, VATICAN)

ing Prince of Urbino, and it was here that Raphael was born. The Duke was one of the most distinguished and perhaps the most discriminating of the great Renaissance patrons of art as well as of letters, and a series of well-known painters, among them Piero della Francesca, Melozzo da Forli and Justus of Ghent, were in his service at this time. Duke Frederick's interest in everything artistic had made the capital of his little principality one of the most important art centres of this time and his palace is still the Mecca for visitors to Italy who are interested in the development of art, for it possesses some of the great masterpieces of the Renaissance painters. Raphael in his boyhood had in a more limited way almost as favorable surroundings as Michelangelo enjoyed in Florence, but with his father's favor of his studies instead of the opposition that this Florentine contemporary encountered. Urbino was indeed almost as much of a centre of intellectual influence and progress at this time as the court of Lorenzo the Magnificent, at which Michelangelo was brought up. It was at Urbino that Baldassare Castiglione wrote *"Il Cortigiano,"* the book of The Gentleman, the elegant setting forth of what was represented by that term in the Renaissance period.

When Raphael was about eleven his father died, but fortunately the maternal uncle under whose guardianship he passed was quite as favorable to art as his father had been. Yielding to the wishes of the boy he permitted him to enter the studio of Timoteo Viti, a pupil of the artist Francia, who had lately returned from his studies in other portions of Italy to take up his residence in his native country. During the next few years Raphael devoted himself to that training in drawing which was to mean so much for him. Just about a century ago a sketchbook was found, now in the Academy of Venice, having been purchased for the city, in which there are over a hundred pen-and-ink drawings of various pictures copied by Raphael, and competent critics declare that the masterly genius of the artist can already be recognized in them.

Besides these he painted a series of pictures in Timoteo's studio. Some of these have been preserved. Probably the best known is "St. George and St. Michael," now in the Louvre, though the "Dream of the Knight" in the National Gallery,

RAPHAEL, DREAM OF THE KNIGHT

London, has been the admiration of young folk particularly for many generations. There are some who claim that the most charming of these early pictures painted at Urbino is the "Three Graces of the Tribune of Chantilly."

After this Raphael studied for a time, probably for some four years, with Perugino at Perugia. This period of his life is mainly interesting from the fact that while he acquired Perugino's technique, Raphael went far beyond his master, though for a time his development was probably hindered rather than helped by that master's influence. Only one of the paintings made at Perugia, "The Coronation of the Virgin," painted for the Franciscans of that city, and now to be seen in the Vatican, reveals as art critics declare the real genius of Raphael shining through and above the qualities that he had borrowed from his Perugian master.

After Raphael's years of fruitful student work in the Hill Country so dear to students of Italian culture for its four periods of great art, there came his Florentine period, which represents a new and wonderful evolution of his artistic genius. Here, when he arrived in 1504, Leonardo da Vinci in his productive forties and the young Michelangelo in his revealing later twenties were at work at their famous historical cartoons, and the atmosphere of the city was deeply imbued with the Renaissance spirit. It is a little difficult now to think of Raphael as merely a young struggling artist, making his living by painting portraits for rather commonplace people, and executing his earlier Madonnas for private oratories, partly from love of his work but mainly because he needed the money, yet this constituted his occupation.*

His Madonnas soon made him famous. At the end of his first year in Florence came one of his masterpieces, the "Madonna of the Grand Duke," still to be seen at the Pitti. At this time Raphael was under the influence of the great Dominican painter Fra Bartolommeo, though undoubtedly the specimens of Fra Angelico's work so frequent in Florence had their power over him. The sweetness and mystical beauty which, added to the human tenderness of his lovely mothers, make his Madonnas so charming are the fruit of Raphael's studies in Florence. Under the influence of the two Dominican painters such great pictures as "La Belle Jardinière," of the Louvre, the "Madonna of the Goldfinch" now in the Uffizi, Florence, and the "Madonna of the Meadow," one of the treasures of the Vienna collection, were produced.

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* As pointed out by Grimm in his "Life of Michelangelo" the patrons of the Renaissance painters at the beginning of that period, and indeed until after the climax of its development had been reached, were either of the middle class or consisted of the religious orders and ecclesiastical authorities intent on the decoration of churches. The town folk ordered pictures for their homes or for the decoration of churches. The artist was a craftsman, like the goldsmith or any

Just before he left Florence he painted for Atlanta Baglioni an "Entombment" which is his first attempt at an historic picture. The critics declare that it was spoiled somewhat by overwork at it and overanxiety to rival some of the great paintings of this kind from Leonardo and Michelangelo which Raphael had so much admired. However that may be, it is undoubtedly one of the world's greatest pictures, especially when the age of the artist, twenty-five, is taken into account. Just after he finished it he was summoned to Rome by that discerning patron of genius Pope Julius II. His great opportunity had arrived. Only a little more than ten years of life lay ahead of him, but in that ten years the art of the world was to receive almost its greatest treasures. In their "Italian Cities" the Blashfields have told the story of his Roman career:—

"Raphael's conquest of his surroundings was almost magical: he arrived a youth, well spoken of as to skill, yet by reputation hardly even *par inter pares;* in ten short years—how long if we count them in art history—he died, having painted the Vatican, the Farnesina, world-famous altar-pieces, having planned the restoration of the entire *urbs,* having reconciled enemies and stimulated friends, and having succeeded without being hated.

other. When artists became the favorites of princes and kings and rulers, when they came to occupy positions at courts, it was not long before decadence began. Lives at court were not calculated to bring out what was best nor to encourage profound thinking nor provide the leisure which is necessary for great art, and truth lost its attraction in jealous rivalry and the desire to please a patron.

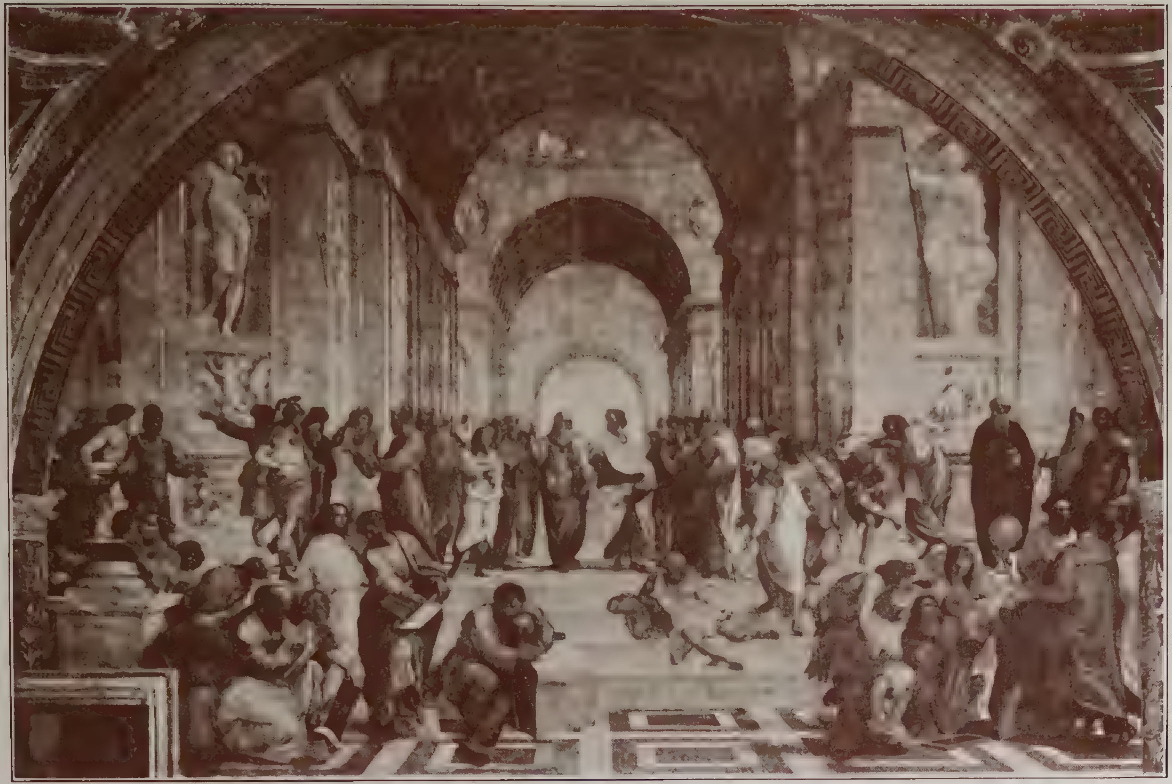
"He achieved this success by his great and manifold capacity, but, most of all, because in art he was the greatest assimilator and composer who ever lived. The two words are each other's complements; he received impressions, and he put them together; his temperament was exactly suited to this marvellous forcing house of Rome, for a Roman school never really existed, it was simply the Tusco-Umbrian school throned upon seven hills and growing grander and freer in the contemplation of Antiquity.

"To this contemplation, Raphael brought not only a brilliant endowment but an astonishing mental accumulation; the mild eyes of the Uffizi portrait were piercing when they looked upon nature or upon art, and behind them was an alembic in which the things that entered through those eyes fused, precipitated, or crystallized as he willed."

Pope Julius II, himself one of the great geniuses of history, with a dream of a united Italy long before there was any possibility of its accomplishment, and with an appreciation of genius that alone would have given him a commanding place among the world's great rulers, had summoned to Rome for the decoration of the apartments of the Vatican some of the greatest painters of the time. Even from distant Flanders came Reuisch and then there were Perugino, Raphael's old master, now advanced in years, and Signorelli, quite as old, and Lotto and Sodoma and Peruzzi and others. It was beside these that Raphael had to do his work. Within a year of Raphael's coming he, the youngest of them all, not yet twenty-six years of age, was selected by the Pope—how well advised he was—as the one to whom all the important decorations should be entrusted. Then came the opportunity to do the Camera della Segnatura, that triumph of decorative art. "This chamber of the Vatican" became, as Raphael's biographer in the Catholic Encyclopædia says, "a sort of mirror of the tendencies of the human mind, a summary of all its ideal history, a sort of pantheon of spiritual grandeurs. Thereby the representation of ideas acquired a dramatic value, being no longer as in the Middle Ages the immovable exposition of an unchangeable truth but the impassioned search for knowledge in all its branches, the moral life of humanity."

His decorations of the Camera de la Segnatura are probably among the greatest contributions to decorative art ever made. They are certainly among the most interesting. Only Michelangelo's wonderful decorations in the Sistine Chapel rival them and there are some critics who would concede the palm to Raphael. Here we have the index not only of his power to paint marvellously but also of his intellectual genius and his judgment of values in the history of literature and philosophy. Such pictures as the "Disputa" and the "School of Athens" are real contributions to the history of human thought. Only a man who was himself of profound intellectuality on a plane of equality with the great intellectual geniuses whom he was painting could have conceived and completed these magnificent groups of the world's greatest men successfully. It has been well said that to appreciate properly the pictures of the Segnatura is of itself an education. To be able to take them in their full significance as essays in art and in the history of literature and philosophy is to have gone far on the road to culture. Raphael's achievement here is that of a great mind gifted with a wonderful power of comprehension as well as an almost unrivalled faculty of expression. No decorative pictures of the modern time, however great, can be placed beside them.

It has often been a source of wonder how Raphael was able to paint so appropriately the figures of Plato, Socrates, Aristotle and others in his great picture of the "School of Athens." Only the genius that gives men intuition, that enabled Shakespeare to portray wonderfully the character of the men of all times and the blind Homer to give us an enduring picture of man could have enabled him to do it. It was the time of the New Learning and the recently aroused interest in the classics, but no mere accumulation of information would ever have made him capable of such a representation. As Gladstone once said of Homer, a whole encyclopædia of information with regard to the Greeks of Homer's time would not have told us as much about them as Homer has given us. At the time when he did the painting Raphael was not much more than thirty and his life had been occupied with painting and not with the accumulation of erudition. Henry Strachey in



RAPHAEL, SCHOOL OF ATHENS

his sketch of Raphael calls attention to the fact that none of the great contemporary Italian humanists were in Rome at this time. Neither Bembo nor Bibbiena nor Castiglione were where they might be readily consulted, and it was only Raphael's genius insight that enabled him to accomplish so wonderfully the task he had been set. For while the subjects were probably chosen for him he had to work out the details for himself, and indeed these wonderful compositions show this very clearly.

Raphael revealed for us in the "Camera della Segnatura," as almost no one else has done, the attitude of mind of his period with regard to the meaning of life. Years of scholarly devotion to the study of pagan antiquity and especially the great Greek philosophers and poets, as well as the remains of its sculpture, had awakened in men's minds a broader view of life and its significance than had been possible for centuries. Raphael has summed this up in the wonderful documents that he has left in the Vatican and put on canvas what the great scholars of the time tried to express in words. The late Professor Kraus of Munich in his chapter on Medicean Rome in the second volume of the Cambridge Modern History has told the story of this:

"The four pictures of the camera represent the aspirations of the soul of man in each of its faculties; the striving of all humanity towards God by means of æsthetic perception (Parnassus), the explanation of reason in philosophical inquiry and all scientific research (the *School of Athens*), order in Church and State (*Gift of Ecclesiastical and Secular Laws*) and finally Theology. The whole may be summed up as a pictorial representation of Pico della Mirandola's celebrated phrase, *philosophia veritatem quaerit, theologia invenit, religio possidet;* and it corresponds with what Marsilio says in his *Academy of Noble Minds* when he characterized our life's work as an ascent to the angels and to God."

Artists and poets and writers have vied with each other in saying strong words of high praise with regard to these decorations. The Blashfields in their "Italian Cities" have told the story of the limitations under which he worked, those of the room, lighted from two sides with two walls pierced by windows, and then the fact that to a great extent probably his subjects were dictated, yet he must needs body them forth in concrete form and clearly. How well the young artist not only overcame these difficulties but out of the very difficulties created the most marvellous portions of his masterpieces the Blashfields have also told.

In one paragraph they have detailed the story of Raphael's associations with the artists of Rome at that period. Because it gives some idea of the wealth of artistic genius existent in this time it concerns us deeply here. They say: "The Urbinate (Raphael) strong as he was, had felt the need of strengthening himself still further by acquiring the friendship of other artists, and creating a kind of little court. We are told that almost nightly at his table there met, Luca Signorelli, Pietro Perugino, Baldassare Peruzzi, Giovanantonio Bazzi and Lorenzo Lotto. What an age! when a single supper party could furnish such an assemblage of world-famous artists, who in turn, as they went from their quarters in the Borgo Vecchio, might meet Michelangelo returning from the Vatican with the contingent of Florentines, Bugiardini, Granacci, Aristotile da Sangallo, and l'Indaco, who were helping him in the Sistine Chapel."

So much has been said of the Camera della Segnatura that it is sometimes forgotten that there are other rooms at the Vatican decorated by Raphael, only less wonderful than this. If they existed anywhere else they would be prized very highly, and if they were by any other artist would place him among the great artists of all time. The Camera del Incendio, so called because of the representation of "The Fire in the Borgo," has in this scene one of the most dramatic pictures ever painted. There are other great dramatic subjects finely treated here, as "The Oath of Leo III" and the "Coronation of Charlemagne." In this work Raphael was probably assisted to a noteworthy extent by pupils and associates, yet all of it is stamped with his genius. There are in the Camera del Eliodoro such pictures as "Jacob's Dream," the "Sacrifice of Isaac" and the "Burning Bush," which show Raphael's wonderful power of composition and at the same time the readiness of genius which enabled him to turn from one subject to another, accomplishing so much that one is astounded to think of how ideas must have crowded on him and yet how well all is done considering that the artist so often needs above all the element of time to perfect his work. Had Raphael been spared to the ordinary length of life or to such years as Michelangelo's four score and ten or Titian's almost five score, what an abundance of his art there would be in the world.

One of Raphael's greatest works at Rome is comparatively little appreciated except by those whose attention has been particularly called to it. This was his making of the cartoons for the series of tapestries to be hung in the Sistine Chapel. These tapestries were to be manufactured in the Low Countries, but the Pope wanted the subjects that were to be represented to come from Raphael. Raphael consented to make the cartoons for them, though he knew that they would be cut into rolls some two inches wide to be handed over to the weavers. He had no idea that they would ever be exhibited except in the imperfect way in which tapestry can represent painting. Most artists of high rank would probably refuse such a commission. Certainly it seemed rather derogatory to his dignity as an artist to think that he should furnish only copies that were themselves to have no place among his collected works and prove at most a dubious addition to his fame. Under these circumstances it would not have been surprising if the composition and the manner of execution of the cartoons had been far below that of his works in painting and fresco.

He gave himself to the commission, however, whole-heartedly and executed a series of designs that are among the greatest compositions that have ever come from an artist's hand. These cartoons, after having been copied in tapestry, lay in the narrow rolls into which they had been slit in the tapestry factory in the Low Countries until, resurrected almost in our own time, they became the most precious treasures of the South Kensington Museum in London. Here they have been the favorite study of artists from all countries and have added laurels to Raphael's crown of artistic glory. He had the artist's true sense of joy in work and the artistic conscience to satisfy the canons of his own judgment and taste, even in a task that was to represent him only at second hand. Almost never in history has the great artist consented thus to make himself subsidiary to the artisan, and that Raphael, the greatest of artists, should have done it shows the genuine spirit of true art as developed at this time.

Some of these cartoons, as "St. Paul Preaching to the Athenians," are considered among Raphael's greatest works. Raphael has well been called the greatest decorator who ever lived, yet he consented to add his mite to the decoration of the Sistine Chapel, in which Michelangelo's triumphant work stood out so grandly above, in order that the hangings on the walls might be worthy of that wonderful chapel that a great Pope had planned and had had the happy faculty of securing the greatest men of all time as collaborators in finishing.

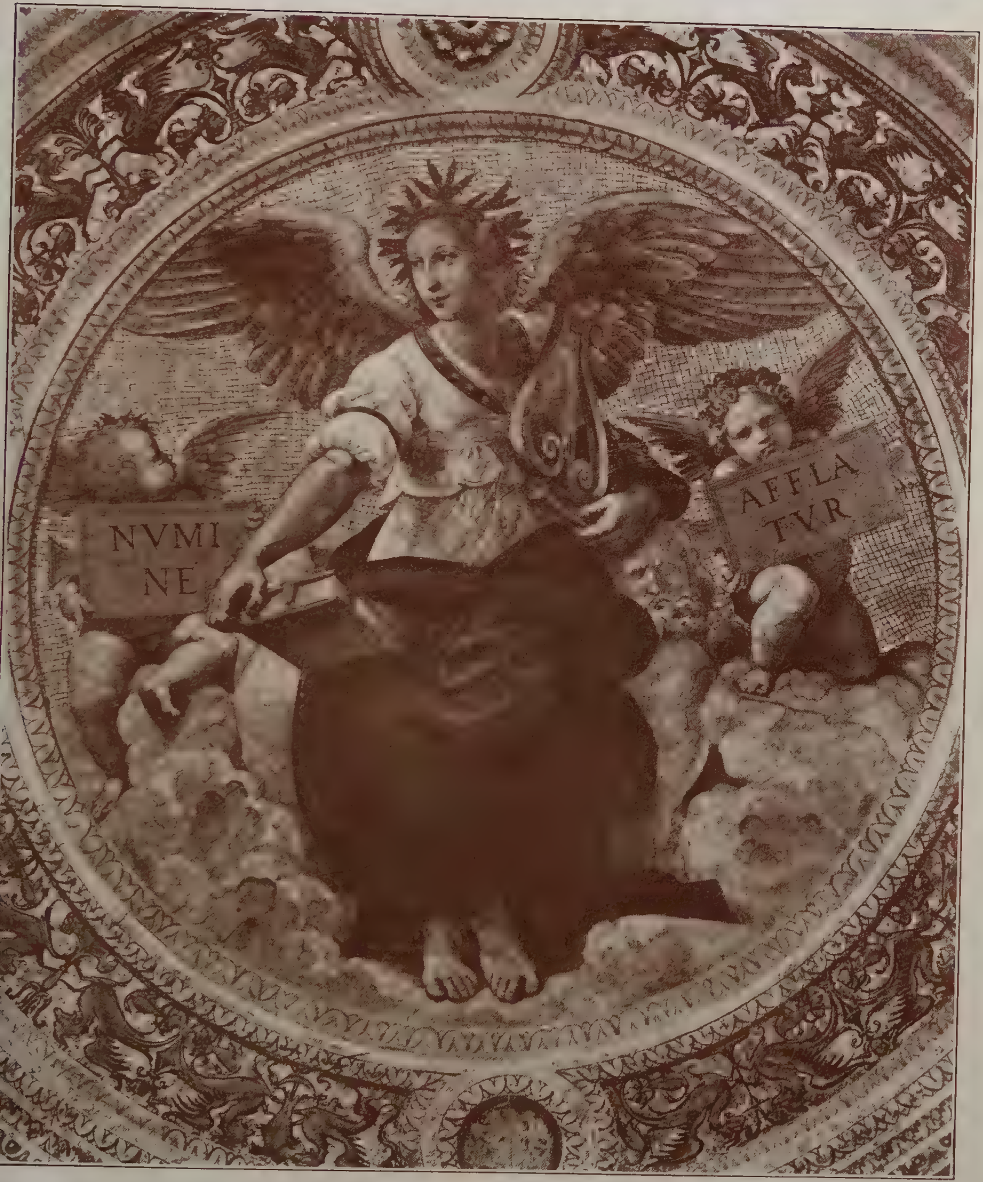
Perhaps nothing shows the wonderful artistic power and influence of Raphael more than the fact that his compositions have dictated practically all the interpretation of Bible scenes for the after time. Quite unconsciously men have adopted his way of looking at things. He did not costume Biblical characters in the clothes of his own time, but on the other hand, in spite of his wide knowledge as an archæologist, he did not attempt to make his pictures true to the genuine life of the times and the costuming of the older period. The set of cartoons particularly illustrate how well he visualized the scenes and yet the Apostles are dressed in garments that they never wore. As I write there is before me an engraving of Paul preaching to the Athenians. That Unknown God whom they had worshipped he is come to preach to them. It is a wonderful composition. Probably nothing has ever excelled it. There is probably not a single feature in it, however, that in any way represents what is true to history in the scene or the people. After his time for centuries his visualization satisfied people's minds, so much is genius able to impose itself on humanity.

The Sistine Madonna, the only picture of Raphael's painted on canvas, is usually considered to be the greatest religious painting that ever was executed and one of the most wonderful realizations of vivid poetic imagination that the world possesses. Everything in it is full of sublime suggestion. The majestic attitude of the Madonna posed upon the clouds, her face of perfect beauty, her far-away gaze of rapt veneration and absorption in her motherhood, but motherhood of the Divine, proclaim her a vision from Heaven. No more wonderful conception of the human mother of the Divinity has ever been reached and yet critics and artists are a unit in proclaiming that the Virgin Mother is surpassed in wondrous realization of profound imagination by the Divine Child Whom she holds so tenderly in her arms. He looks out into the world from those arms with solemn sacred eyes that somehow give the idea of His profound interest in all that He sees and of an all-embracing vision. Then there is the rugged, bearded Pope Sixtus gazing upward with rapt devotion and the graceful, beautiful Saint Barbara adequately representative of the modest virgins who all over the world, for all the time since the coming of Christ, modestly cast their eyes down before the Virgin Mother and her child. Below are the two exquisite boy angels, whose charming childish attitudes of rapture have always roused so much interest.

It is said that these were the portraits of two little boys who came to gaze, boy fashion, curiously into the window of the studio while Raphael was painting. His transformation of the mischievous, inquisitive, supremely boyish faces into the look of angelic rapture is one of the triumphs of the picture that have always made it of the greatest interest. Painted originally for an Italian Church it is now the treasure of the gallery of Dresden, where it occupies a room by itself that is more like a shrine to which devout worshippers come from all over the world and in which as in some sacred place the visitor distinctly lowers his voice and walks on tiptoe. Nothing tells more of what the picture means than to watch the crowds that come from all over the world to see it and the way in which it is almost worshipped by those whose opinion is worth the most.

After the Sistine Madonna, unfortunately for art, Raphael's attention was drawn more and more from its special sphere of work as a painter and his time was taken up and his attention absorbed by the larger, wider pursuits of art director and archæologist. This would not have been so sad perhaps only for the brevity of the life destined to be his. Had he lived to three score and ten the ten years devoted to these phases of art work, as they may well be called, would probably have proved beneficial to his development. As it was we are likely to think of it as time wasted by a great genius painter. His art directorship proves the genius of the man. His workshop at Rome gradually took on the character of a school of art. In this designs were prepared not only for fresco but for mosaic work, for tapestry, for the carving of wood and stone and even for engraving and other phases of art. Vasari mentions fifty scholars who were employed as pupils and assistants in this workshop. In the meantime Raphael's interest in art history and his passion for classical art led him to dispatch artists to Naples and Athens, to make drawings of noteworthy antiquities that had been discovered. His manifold interests serve to show how broad were his own sympathies with everything artistic.

Towards the end of his life, though Raphael at thirty-five had no idea that death was impending, he devoted himself to the study of Roman antiquities and to the direction of the archæological excavations which were then being carried on in Rome. He had conceived the design of reconstructing an entire plan of ancient Rome, based partly on the discoveries of the excavators and partly on the descriptions of classical writers. For this he made numerous plans and sketches with his own hand, and though these have unfortunately perished, there is in the Library at Munich a copy of the report which he drew up on this subject. It is in the form of a Latin letter to Pope Leo X, showing how deeply the Pope was interested in the scheme and that very probably it was due to his urging that Raphael took it up. This letter has been declared a monument to the industry and the archæological learning of the artist. Ordinarily in the modern time we are likely to think that the artist devotes himself to his painting and leaves to the professional scholar such work as this. We do not look for many-sidedness in the artist. Raphael, however, like Leonardo da Vinci and Michelangelo, evidently had a magnificent breadth of intellect that would have given the most precious fruits of the spirit in many lines besides painting, had he only lived to anything like the years of so many of his great contemporaries.



RAPHAEL, POETRY (MOSAIC, VATICAN)

CHAPTER II

LEONARDO DA VINCI

When it was announced that the "Mona Lisa" had been stolen from the Louvre a thrill of solicitude that was almost dismay went through the civilized world. Its recovery has been a triumph. It is only a woman's portrait, herself of no importance, with what some might call a conventional landscape behind it, all on a comparatively small canvas, with its colors rather dimmed by time and by unfortunate surroundings during its somewhat over four hundred years of existence, yet it was looked upon as one of the most precious art treasures of the race. Critics with a right to an opinion have often declared that it was probably the greatest portrait of a human being that had ever been painted. When we recall how magnificently Rembrandt portrayed the Dutch burghers of his time, with what marvellous expression Raphael painted some of the personages he knew and how wondrously Velasquez painted some of his contemporaries; the placing of Leonardo's "Mona Lisa" above them by good critics shows what a supreme place must be accorded to it in the history of art. Art critics have expressed themselves in almost unmeasured terms as to the significance of the expression on the face of the "Mona Lisa." They do not hesitate to proclaim that Leonardo painted the very soul and not merely the bodily features of a woman. Walter Pater in his "The Renaissance" has written an almost dithyrambic description of it that is well known and yet deserves to be quoted again if only to show how a really great critic can be carried away by a favorite work of art:—

"'La Gioconda' is, in the truest sense, Leonardo's masterpiece, the revealing instance of his mode of thought and work. In suggestiveness, only the 'Melancholia' of Dürer is comparable to it; and no crude symbolism disturbs the effect of its subdued and graceful mystery. We all know the face and hands of the figure, set in its marble chair, in that cirque of fantastic rocks, as in some faint light under sea. Perhaps of all ancient pictures time has chilled it least.

" The presence that thus rose so strangely beside the waters, is expressive of what in the ways of a thousand years man had come to desire. Here is the head upon which all 'the ends of the world are come,' and the eyelids are a little weary. It is a beauty wrought out from within upon the flesh, the deposit, little cell by cell, of strange thoughts and fantastic reveries and exquisite passions. Set it for a moment beside one of those white Greek goddesses or beautiful women of antiquity, and how would they be troubled by this beauty, into which the soul with all its maladies has passed? All the thoughts and experience of the world have etched and moulded there, in that which they have of power to refine and make expressive the outward form, the animalism of Greece, the lust of Rome, the reverie of the middle age with its spiritual ambition and imaginative loves, the return of the Pagan world, the sins of the Borgias. She is older than the rocks among which she sits; like the vampire, she has been dead many times, and learned the secrets of the grave; and has been a diver in deep seas, and keeps their fallen day about her; and trafficked for strange webs with Eastern merchants; and, as Leda, was the mother of Helen of Troy, and, as Saint Anne, the mother of Mary; and all this has been to her but as the sound of lyres and flutes, and lives only in the delicacy with which it has moulded the changing lineaments, and tinged the eyelids and the hands."

While the " Mona Lisa " was undoubtedly the greatest of Leonardo's portraits, perhaps the best possible idea of Leonardo's power as an artist is to be found in the " Last Supper." Instead of making a placid group he has chosen the moment just after the Lord had said that one of the Twelve will betray Him and when all are asking " Is it I, Lord? " He represents not only the individual shock but also the natural grouping that occurred as a consequence of the announcement. There are four groups of three each, separate and with very distinct interest and yet they are so arranged as not to break the unity of the picture. On the left side the outer three are all intently gazing on the Lord while the external group on the other side are gazing away from Him, but their hands all point towards Him. The inner three on the right are talking directly to Him while the corresponding three on the left are occupied among themselves and yet evidently intent on Him. There was probably never put together a more expressive set of faces. Each one is eminently individual, and each one shows marvellously the character of the Apostle represented. It has been said that it is as if the painter had made a condensed biography of each one of them with his brush. All the special characteristics of the different Apostles that we know are here to be seen in their faces. He has painted the souls and characters of the men in the imaginary portraits that he makes.

There is an old tradition mentioned by Vasari, that charming gatherer of legends with regard to the old painters, that Leonardo, unable to satisfy himself with the head and face of Jesus, left it unfinished. This would indeed have been a sad loss to art. Leonardo hesitated for long, wondering above all whether he should follow a model, but finally made his peace with tradition, accepted the type of head for the Lord that had been created by Giotto, and refining it still more succeeded in giving a look of mystic superhumanity to it that would evoke the idea of divinity. It is easy to see how much he borrowed but it is harder to realize how much he added, yet artists who have studied it have felt that here indeed was a triumph and that, as far as possible, Leonardo had represented the human face divine. He followed his model strictly in the case of the Apostles' heads and none knew better than he how to select models, but in the head of Christ he turns from the model and works out his design from ideals of the human face of which so many existed in his well-stored fancy. The face of Christ was left somewhat vague, trembling, undissolved like faces seen in cloud or in the fire. Leonardo himself once counselled his students to look for suggestions in curious cloud and fire shapes and even to study the vague forms that occur in imitation of human faces on cracked and stained surfaces of ruined walls, and some of his own devotion to this seems to have been of help to him in this marvellous face.

Much has been said about the head of Judas in this picture. According to Vasari, Leonardo fairly outdid himself on this face and head and he talks about "the force and truth with which the master has exhibited the imperious determination, hatred and treachery of Judas." According to another legend he had haunted the purlieus of Florence for months, searching for a head and face expressive enough in its malignity for his Judas. Possibly one might expect to find a human monster then in the Apostle traitor. In spite of Vasari's traditions, who here seems to have indulged his fancy for the sensational, Judas has a very interesting human face, rather weak than strong, but with redeeming qualities in it. After all it must not be forgotten that the face had to recall or at least not negative the fact that this man had been for three years in the company of the Lord, chosen as one of the Twelve, with possibilities of as great accomplishment for good as the others if he had not turned aside. Judas was not foreordained to be a traitor, but he made himself such. It was not his nature that compelled him to the crime, but his failure to control certain elemental passions, above all the craving for money, that led him into it. Many a good man since has been led off the same way. We have the face of a man who might have been one of the honored Apostles. That he was not is his own fault. It is said that the same model was used by Leonardo for Peter and Judas. If so, surely it was a stroke of genius. Peter too was weak. He even denied the Master, but had it in him to realize his weakness and repent. Peter's face is in the light, Judas' face in the shadow of Leonardo's picture. If Leonardo had not given Judas the bag to carry, thrown his face out of the line of the Apostles near him who are in the light, and made him ominously upset the salt while reaching for a better quality of bread than that near him, it would have been rather difficult to pick him out from among the others.

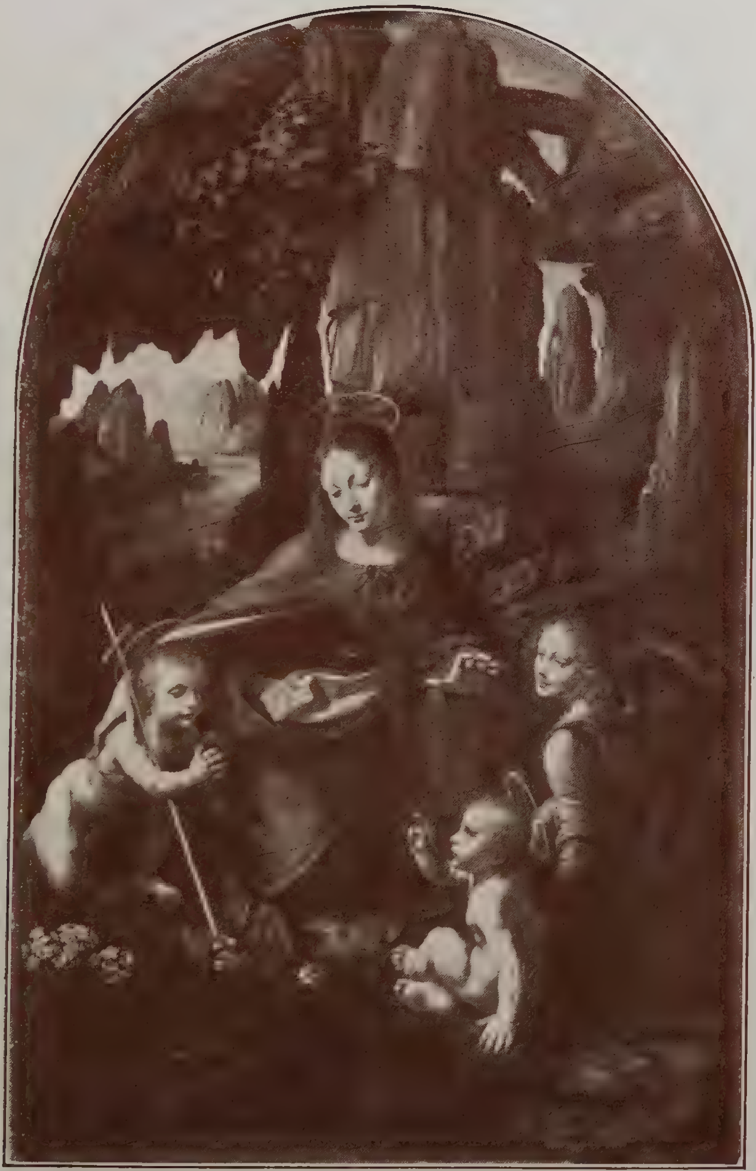
One thing is absolutely true in this great work of art. All the faces of the Apostles, with the possible exception of John's, are rudely strong. The men who were to carry on the work of the Master and convert the world to Christianity were not effeminate in any sense, and above all they had been the rough fishermen of Galilee. Their costumes are modernized, their beards are probably less unkempt than if they were really Judeans, but here is a group of men whose very strength of feature makes them striking.

As has been well said, Leonardo broke up the old formality and immobility of the earlier painters and brought life and action into the scene. For the first time the personages are deprived of their halos and there is nothing to make the group of men anything more than human beings deeply interested in a great purpose and disturbed to the depths of their beings by the suggestion from the Master Himself that now that purpose was to be thwarted by the treason of one of their number. This conception seems all the more natural when we recall that none of them had as yet been confirmed in grace, that one was to deny, another betray and all were to be hesitant and cowardly in a great moment of trial.

With all this of thought in Leonardo's picture it might be expected that all of his attention would be given to the faces and little to the composition itself and to the setting of the picture. The exact contrary is what happens. The composition is probably the most wonderful ever done. The room itself is so arranged that everything leads the eye toward the centre of the picture where the Master sits, while behind Him the middle one of three windows, with an arched casement, frames Him apart from the Apostles. Through these three windows at the back can be seen one of the varied mountainous landscapes that Leonardo delighted in. The extent of the landscape which can be seen shows that the supper was held in an " upper room." The bare beams of the ceiling in that coffered arrangement common in Italy, the walls ornamented with large panel spaces filled in with a damasked pattern are all worked over with artistic completeness of detail. It is details of this kind one might expect the painter of the Last Supper to have overlooked in his intentness on the sublime moment and the characters. The tablecloth, moreover, is beautifully worked and the linen and the pattern of it and the folds are done with as meticulous care as one might expect from a *genre* painter of tissues. The glasses and table service are very carefully drawn and every detail was executed with an artistic conscience and eye to perfection, even of trifles, that reveals the thoroughness and all-embracing skill of the artist.

The more one knows of Leonardo's power to paint detail and of his devoted study of nature, the less surprise is there at the traditions with regard to his head of Medusa. It was much for an artist to attempt to make a picture of this hideous head on which were the writhing serpents, the sight of which, according to tradition, turned beholders to stone, but he has succeeded in accomplishing a presentation of the horrible as far as it is possible. The writhing serpents are done with a devotion to detail and a lifelike naturalness that only a great observer of nature could have reached. Besides the serpents in all their varieties there are bats and lizards and vermin of many kinds in the picture, while the cloudy mephitic breath which can be seen issuing from the mouth completes the picture. The intense realism of these details of low animal life is a surprise at that period, but above all a surprise that it should have been done by a man who had such wonderful power of idealization when he wished to use it. It is this combination of qualities so opposite in themselves and often thought mutually exclusive that makes the never-ending surprise of Leonardo's genius. That the painter of the "Last Supper" and the charming "Madonna of the Rocks" should have also made this "Head of Medusa" is indeed difficult to understand, and yet not more than might be expected from one of the greatest of the artists of the Renaissance who is at the same time almost the world's most manifold genius.

With all this of magnificent accomplishment in painting, which sets him on a pinnacle by himself in this great department of art, it might be thought that Leonardo's main claim to recognition was because of his painting. He himself, however, would have been the first to object to estimation of him on any such grounds. He probably scarcely considered himself to be a painter at all, or at least occupied himself with painting only in his leisure moments. He beat Michelangelo once in a competition in sculpture, but doubtless thought less of himself as a sculptor than as a painter. He made what his generation declared to be the greatest equestrian statue



LEONARDO DA VINCI, MADONNA OF THE ROCKS (LONDON)

ever modelled and his generation knew what they meant by that, for they had before them two such triumphs of equestrian statuary as Donatello's " Gatamelata " and Verrocchio's " Colleoni." Just as in painting, when he wanted to do sculpture he could do it with a supreme perfection that is unrivalled. Strange as it may seem, Leonardo thought of himself as an engineer. He actually took on himself the contract for extending the canal system around Milan and accomplished it so well that his work still remains in use. During the course of this he invented the wheelbarrow, the movable derrick, the self-dumping derrick, various modes of moving rock, locks for canals and a system for maintaining a navigable level of water in rivers which were usually nearly dry in the summer time.

Leonardo had the thorough appreciation of himself that genius is so likely to have and that in smaller men seems conceit. He knew that there was practically nothing to which he cared to turn his hand in which he could not work out original ideas. He was only in his middle twenties when he wrote the letter to Ludovico Sforza in which he tells his future patron very calmly all the things he might be expected to do if the Duke should have need of them.

" Most Illustrious Lord.—Having studied and estimated the works of the present inventors of warlike engines, I have found that in them there is nothing novel to distinguish them. I therefore force myself to address your Excellency that I may disclose to you the secrets of my art. 1. I have a method of bridges, very light and very strong; easy of transport and incombustible. 2. New means of destroying any fortress or castle (which hath not foundations hewn of solid rock) without the employment of bombards. 3. Of making mines and passages, immediately and noiselessly, under ditches and streams. 4. I have designed irresistible protected chariots for the carrying of artillery against the enemy. 5. I can construct bombards, cannon, mortars, passavolanti; all new and very beautiful. 6. Likewise battering rams, machines for the casting of projectiles, and other astounding engines. 7. For sea combats I have contrivances both offensive and defensive; ships whose sides would repel stone and iron balls, and explosives, unknown to any soul. 8. In days of peace, I should hope to satisfy your Excellency in architecture, in the erection of public and private buildings, in the construction of canals and aqueducts. I am acquainted with the arts of sculpture and painting, and can execute orders in marble, metal, clay or in painting with oil, as well as any artist. And I can undertake that equestrian statue cast in bronze, which shall eternally glorify the blessed memory of your lordship's father and of the illustrious house of Sforza.

" And if any of the above seem extravagant or beyond the reach of possibility, I offer myself prepared to make experiment in your park; or in whatsoever place it may please your Excellency to appoint; to whose gracious attention I most humbly recommend myself."

Was there ever a more confident genius? There was never a man who fulfilled all his promises better.

What Leonardo was able to accomplish as an engineer can be seen in the canal some 200 miles in length still in existence by which he conducted the waters of the Adda over the arduous passes of the Valtellina to the gates of Milan. In its own way and considering the conditions under which he had to work and the obstacles that he had to overcome, this was as great an engineering feat as the digging of the Panama Canal, certainly a much greater engineering project than the completion of the Suez Canal, though until Panama came to shroud the glory of that our generation was inclined to be rather proud of that achievement.

So far from being merely an artistic mind Leonardo da Vinci had typically the scientific and inquiring mind. Whenever a scientific problem came up to him, no matter how others had solved it before him and above all no matter how his contemporaries were solving it, he solved it for himself and almost inevitably in the true light of science. For instance while he was engineer, in charge, to use our modern term, of the canals of central Italy, the cuttings necessary for them brought to light a series of fossils. These were mainly shells resembling the seashells of his time, though not exactly like them. Before this a number of such finds had been made and man had found it very hard to explain them. They were usually uncovered beneath a rather thick layer of earth. They looked like shells that belonged to creatures that had lived on a seashore. How could their presence be explained far from the sea and completely covered up? Occasionally, when found near the surface on the tops of rather high mountains a distance from the sea, the explanation had been offered and generally accepted that they had been deposited there by the Deluge. The buried shells and especially those deeply buried could not be thus explained. Scientists, and let us not forget that it was scientists in the true sense of the term who were especially concerned with such objects, men who knew their mathematics and principles of science very well and who had made valuable observations in other departments of science, evolved a learned theory of their presence. These were incomplete beings occurring in the earth because of a surplusage of creative power that had not quite finished its work. Their development had been arrested as it were before they actually became living creatures. When Leonardo da Vinci ran across the shells in the cuttings for his canals, he suggested another and a simpler explanation as it seemed to him. These were actually marine shellfish, which had been deposited where they now were at a time when this portion of land was submerged by the sea. They had become covered during the process of sedimentation and transformation of the land which had gradually pushed the sea far away. It always requires a genius to offer so simple an explanation as that, and as a rule it seems quite out of the question to most of his contemporaries, because of its very simplicity. They usually express their disdain for such simple-mindedness or wrong-headedness rather forcibly, though after a time they come to accept the explanation of it, but usually refuse to give the inventor any credit for his idea, because it now seems so obvious that they cannot think of it as so very new, after all.

We know that Leonardo had made a series of studies of the shells of the seashore, though ordinarily it was presumed that his studies had been directed rather to their artistic beauty than to scientific knowledge with regard to them. Apparently his very familiarity with them, however, led him to lay the foundation stone of the science of palæontology. There are sketches of a number of the spiral shells to be found in his notebooks. These are all charming in their pretty curves, and they caught his artistic eye. Nature never makes anything merely useful. This strong outwardly rude cover of shell for the amorphous ugly shellfish—that is, ugly according to most human standards—is very pretty in its forms and its color. The fine use that Leonardo made of his study in seashells was pointed out by someone who studied some of the spiral staircases for the corners of palaces in Northern Italy which Leonardo is said to have planned. These were only private stairways leading usually from the ladies' apartments to the gardens of the castles and were probably designed to be useful as fire escapes. They projected sometimes from the angles of the building. We know what hideous things fire escapes can be. These were very pretty and effectively decorative. They were planned in imitation of the spirals of some of the whorl seashells that Leonardo had been studying.

Everywhere we find that mixture of the devotion to the useful and the practical as well as the æsthetic, to the scientific as well as the artistic. He made a series of dissections. These dissections were made at a time when, if we would believe certain of our modern historians of science in its relation to religion, the Church had absolutely forbidden dissection. Such declarations are all the more incomprehensible because not only did all the anatomists and surgeons of this century do dissection quite freely, and the greatest dissections were done in Rome by the Papal Physicians in the Papal Medical School, but every artist of the time studied anatomy for art purposes through dissections. We have dissections from Raphael and from Michelangelo and from many others as well as from Leonardo da Vinci.

Leonardo proposed after making a large number of dissections to write a text-book of anatomy. Ordinarily it might seem that such a text-book from an artist's hands would be eminently superficial and not at all likely to further the science of anatomy, though it might be helpful for students of art, especially in their dissection work. During the past twenty years, however, a series of Leonardo's sketches made from his dissections have been republished from a number of collections of the originals in important libraries in Europe. The collection at Windsor Castle in England is particularly valuable and the sketches are very complete. Anyone who looks over these republications will realize at once that had Leonardo written his text-book of anatomy and illustrated it with his own drawings, it would have been an epoch-making landmark in the history of anatomy and of medicine.

It was not until a quarter of a century after the artist's death that Vesalius, but five years old when Leonardo died, published his great anatomical text-book. At the time Vesalius was only twenty-seven years of age, but his work revolutionized anatomy and he is rightly greeted as the father of modern anatomy. Had Vesalius had the opportunity to consult Leonardo's work, his own would have been greatly facilitated. It was not merely anatomy for art purposes but for all purposes, scientific as well as artistic, that Leonardo with characteristic throroughness had studied.

There are studies of his in zoology, made evidently for the sake of his work in sculpture, that represent important additions to this scientific department. The same thing is true with regard to botany. Flowers caught his artistic eye, but they appealed quite as much to the scientific sense and so we find sketches of many varieties of them that are very interesting but also very startling from a scientific standpoint because they show a knowledge of the parts of the flowers in detail not usually supposed to exist at that time. One is not surprised to hear that he did distinguished work in mathematics. Somehow the exact scientific bent of his mind and its literalness in all matters pertaining to science would lead us to expect that. There probably never has been a mind so thoroughly rounded out as his. Aristotle had greater scientific precision and wider knowledge, but lacked something at least of Leonardo's power to execute his artistic ideas, or we would surely have some great art from him or traditions of it. It is even not startling, with this knowledge of the scientific side of Leonardo's mind, to find that he advanced a theory of evolution. That generalization far from being new, as is often imagined, has appealed to many great investigating minds down the centuries, according to the title of a modern scientist's history of the theory all the way "From the Greeks to Darwin."

One of the most interesting anticipations of a set of ideas that are definitely considered quite modern, and indeed have developed so recently that we are not quite sure of all their significance as yet, is Leonardo da Vinci's occupation with muscular movements and the saving of time and labor by carefully regulating these movements. He suggested that each different kind of work done by human muscular labor should be carefully studied, with the idea of simplifying and reducing the number of movements necessary for its accomplishment in order to save both time and effort. In a word he anticipated practically the modern ideas of the efficiency engineer of the present time though, as I have said, we are rather prone to think these ideas quite new and recent.

The personality of this universal genius is one of the most interesting that mankind has to study. Every detail is of special import. Leonardo da Vinci was born of the noble Florentine house of Vinci in the Val d'Arno. He was a precocious child, attracting attention by his beauty of feature and by his winning ways. There are stories of his improvising music and songs even when he was very young. A little later we hear of him pitying the caged songbirds and buying them and setting them free. As a growing boy he liked colors; indeed, they may almost be said to have had a fascination for him, and the bright dresses of the Florentine girls and of the peasants from the vicinity caught his eye. Tradition also connects him with a fancy for spirited horses. As if these were not enough to show an artistic temperament, while still scarcely more than a boy he began to design and sketch and even mould objects that he was interested in. Vasari's stories of him show that even at this early date, when he was only a boy, his sketches and plastic work had for subjects smiling women.

His vocation seemed clear and his father took him for education to the workshop of Andrea del Verrocchio, then the greatest artist in Florence and one whose work has always maintained an influence over succeeding generations. Those of us who have seen his "Colleoni" in Venice are likely to think of him as a great sculptor. Undoubtedly he was one of the great sculptors of the world, but he had the broad artistic spirit of the men of the Renaissance, and there was no form of art in which he was not interested and in which he did not accomplish things worthy of his great time to be the admiration of succeeding generations. Verrocchio was a great painter as well as a sculptor, but he was also a worker in metals and, as so many of these artists of the Renaissance, quite ready to design household objects for even ordinary use, provided only he was allowed to put beauty in them. Drinking vessels, instruments of music, gates, wooden doors and above all any objects that were meant for sacred uses he was glad to take commissions for.

It was just the place to train such a many-sided genius as Leonardo, though rather let us say it was just the place for such a many-sided genius to find and train himself. Certainly the young Leonardo must have owed very little except suggestion and some minor directions in technics to anyone else. He very soon came to surpass his master in painting at least, and the master recognized that fact apparently without any jealousy. According to the story as we have it, Verrocchio was employed by the Brethren of Vallombrosa to paint the "Baptism of Christ." Leonardo was given by the master permission to paint an angel in the left-hand corner. There was such a striking contrast between the fresh youthful work of the pupil and the labored work of the master that Verrocchio is said to have painted no more, or at least made no more ambitious attempts at great pictures. Sculpture was always the favorite of the old master, however, so that it was not so much of a tragedy.

It was after this, in his early manhood, that Leonardo became interested in the things of nature around him and made many investigations into their meaning. He took up astronomy for a time and anticipated some of the thoughts that Copernicus was to put in order in his great theory. Such ideas in astronomy were in the air at that time. Cardinal Nicholas of Cusa had more than hinted at them when, about the middle of the fifteenth century, he declared that the earth moved in the heavens like the other stars. Astronomical subjects were favorite speculations for intellectual genius. Regiomontanus, who died before he was forty, was alive in Leonardo's boyhood, and after having begun that series of astronomical leaflets which later were to influence so deeply Columbus and the Portuguese navigators, was invited down to Rome to reform the calendar. Toscanelli made the observations on comets, out of which later their orbits were confirmed. Every form of natural observation caught the inquiring Leonardo's eye, and he studied the plants around him and meditated on crystal formation and occupied himself with all the forms of living things. Somehow his feeling seemed to be that such broadening of his intelligence would help him to breadth of expression in art, though probably it was only his native curiosity occupying itself in the insatiable youthful years with everything that came to hand. His achievements in science are sketched hurriedly in the chapter on Physical Science.

Leonardo seems to have occupied himself much with mechanical toys. He made mechanical birds that flew, mechanical lions that walked and a lizard which crawled and whose horns and eyes moved while the oscillating wings were constantly in motion. Every one of these contrivances, however, was the result of serious study. He took up with great assiduity the problem of flying and was quite sure that he would be able to make a machine by which men would accomplish locomotion through the air. He studied the wings of birds very carefully, and anticipated the knowledge of most of the principles of flight as they developed in later years. He used his mechanical lion as a bait to catch the attention of Francis I. The beast is said to have walked across the audience chamber towards the monarch until, when close to him, it stood up and disclosed the fact that the " Lily of France " was stamped upon its heart. Leonardo's own name is derived from lion and this was supposed to be his declaration of patriotic affection and loyalty to the French King.

Something of the *busyness* of his mind can be understood from the gossip that one hears about him in the letters of the time or even from what may be concluded from his own diary. It is said, for instance, that in the midst of the painting of the "Last Supper" there was quite an interruption in the work because Leonardo became very much interested in the invention of a new machine for mincing meat and making sausages. The head of one of the Apostles was left unfinished for a time because Leonardo could not get the blades of the new machine fixed so as to make them more to his satisfaction. Unfriendly critics said that he would do anything so as to get away from his painting. Those who least understood declared that this was because he was trivial of mind and incapable of concentrating his attention. Anyone who has done artistic work of any kind, or indeed has devoted himself to literary work of any description, is likely to understand Leonardo's ways in such matters. The time comes when the particular vein of thought is exhausted for the moment and new ideas come slowly and with difficulty. The serious self-critical writer or artist recognizes that what he does at such times has not the significance he would like it to have and that he is likely to have to erase or greatly modify most of it afterwards or to regret it if he does not. If he is wise, then, he turns aside and gives his mind a complete rest by devoting it to something quite different from that in which he has been engaged before. If he insists on continuing his work after inspiration ceases or his particular vein of thought runs out, it becomes more and more difficult and more and more of a drudgery. Finally, unless he is almost entirely without proper self-appreciation, he literally has to give up the work that has become so difficult.

Leonardo did not wait for this, but after a certain set of ideas had run out devoted himself to other and quite different things. He had had trouble with cleaning his brushes, and had found that a rather strong lye could be extracted from fowls' droppings. He at once devoted considerable time to finding out whether the material thus obtained could not also be used for the washing of linen. Indeed, his attention to inventions for the relief of domestic difficulties stamps him as quite modern in his notions. Besides his sausage-making machine he invented a spit for the roasting of pigs and designed various forms of utensils that would be handier than those commonly in use at that time.

Some of Leonardo's expressions are well worth chronicling because they show us so well the character of the man. He did not write any moral essays, but a number of expressions of his that have been preserved show that he had decided and very definite opinions with regard to many important human interests. His greatest picture was probably the "Battle of the Standards," in which, according to the descriptions preserved for us, he pictured all the horrors of war. He depicted the frenzy of contest at its fiercest. In one of his famous expressions he disposes of war in two words as *pazzia bestialissima*. I find it a little hard to translate that in the force of the original, but I suppose it would be something like "the climax of animal frenzy." Even that is not as strong as that superlative *bestialissima* in Italian.

The ease with which he transferred his services from one distinguished noble master to another has led some to suggest that he was lacking in loyalty, or at least was quite satisfied with life so long as he found someone to pay him for his work. As a matter of fact he often spent much more in experiments of various kinds than he was paid for the results of his labors, and money seems to have meant very little to him. He was known to be generous to his friends, and he once said "the poor are those who have many wants." He realized very well that poverty is entirely relative, and if a man is dissatisfied with what he has he is poor, no matter how much he has. As might be expected, above all Leonardo realized the preciousness of work. For him indeed blessed was the man who had found his work. His expression was "as a day well spent gives joyful sleep, so does a life well spent give joyful death."

With the disturbed conditions in Italy in his time he probably had to suffer many injustices, frequently had his labors interrupted, his work often undone, and it is easy to understand how much the jealousy of smaller men around him must have irritated him. He realized, however, that happiness depends on not permitting one's self to be bothered by such trifles. The only satisfaction is to go on with one's works. As he said, "The best shield against injustice is to double the cloak of longsuffering." His philosophy of life was in many ways ideal, then. Something of a stoic one needs must be to follow it, but why should the petty trivialities of foolish human squabbling disturb a man who has all of art and science spread out before him and who knows so much more than others of his generation, but whose knowledge surely must have made it very clear to him how little after all he knew of all that was to be known?

Like his Italian contemporaries, generally, Leonardo remained faithful in his adhesion to the old Church. His charming " Madonna " and his " Last Supper " could scarcely have come from one who was not a believer. If these things were mere matters of imagination for the artists of the Renaissance, they would not have been expressed with such marvellous reality. We do not know much about his life, though we know so much about his work and thought. When he came to die, however, he left a legacy for masses for his soul. This was the custom of the time and might very well be considered only a conventional acknowledgment of his adhesion to the customs of his contemporaries. Besides, however, he left a sum of money for candles to be burnt at the shrine of the Blessed Virgin in the little village where he had been raised as a boy and where he had often prayed. This would seem to indicate that the faith of his childhood was still precious to him or had come back in its boyish tenderness at the end of his life. His whole career is that of a wonderfully-rounded man who could scarcely fail to recognize the place of the spiritual in life and its significance for man's understanding of the universe.

Burckhardt concludes one of the chapters of his work on " The Renaissance in Italy " with words that probably sum up better than any others Leonardo's character. No one was better fitted to know whereof he spoke than the great German historian of the Renaissance. " The colossal outlines of Leonardo's nature can never be more than dimly and distantly conceived."

CHAPTER III

MICHELANGELO

Probably the greatest artistic genius that the world has ever known, certainly the man who was best able to express his thoughts most perfectly in every mode of art, with chisel, pencil, brush and pen, was the son of Lodovico de Leonardo Buonarroti-Simoni, whom succeeding generations have known as Michelangelo. He was a member of a noble Italian family much reduced in the world. They claimed to be related to the celebrated Counts of Canossa in Northern Italy, and when Angelo became famous there was a recognition of the relationship by the head of the Canossa family of that day. Nobility is usually willing to be related to great genius, but genealogists have not been able to trace the relationship. When Michelangelo was born (March 6, 1475), his father was the governor of the Castle of Caprese, which stood on the crest of a bold and rocky ridge of the Catenaian Alps, overlooking the wild and rugged hills in which the Tiber and Arno rise. He died two months before Shakespeare's birth in 1564, when another month of life would have brought him to his ninetieth year. He is another typical example of the fact that genius usually inhabits long-lived bodies. Great men may be short-lived by accident, but as a rule the over-abounding vitality, which enables a great mind to express itself greatly, also enables the personality with which it is associated to reach longevity.

It is fortunate for us, seeing that Angelo was such a great genius, that as Lilly said:* "There are few great men of whom we possess so many and such authentic documents." His works are the living monuments of his genius, but we have, besides even minute details of all his long life, his struggles, his triumphs, his friendships, his patrons and above all the fire of trial through which his genius passed in order to secure its expression of itself.

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* W. S. Lilly: "Renaissance Types." Macmillan, 1904.

Michelangelo's mother died when he was very young, her only place in his life being that she gave him his name because she saw something divine in him, though perhaps that is not rare. When his father's term of office expired he returned to Florence, but left his infant son at Caprese in the care of a wet nurse, the daughter of a stone mason and the wife of another stone mason. Michelangelo often said that he imbibed a love for marble and stone-cutting with his first nourishment. The chisel and mallet were his early play-toys, and though he was but six when taken to Florence, there is a tradition of rude charcoal sketches made on the walls by him in his country home. In Florence he was sent to the school of the famous grammarian, Francesco Venturino of Urbino, the teacher of the New Learning, who was also some years later a teacher of Raphael. Michelangelo, according to tradition, paid little attention to his books, however, but was constantly to be found with a pencil in his hand, making sketches of all kinds. He became associated with some art pupils and artists, and before long most of his time was given up to drawing and sketching.

While Michelangelo lived in the Renaissance time, and was undoubtedly influenced very deeply by the humanistic movement, this influence was exerted in very different fashion from what is usually supposed by those who think of the Renaissance as the time when the re-discovery of the Greek classics made for book-knowledge and a consequent deepening and sharpening of the intellectuality of man. Michelangelo had very little interest in books at any time, probably despised scholarship, had little Latin, though it would have been so easy for him to have learned it, seeing that his native tongue was Italian, and had probably no Greek. He died, as I have said, the year that Shakespeare was born, and much has been made of the supposed impossibility of Shakespeare's wonderful conception of the universe of man without more knowledge in the sense of scholarship. Shakespeare had little Latin and less Greek, but undoubtedly the man who best deserves place beside him is Michelangelo, who was similarly situated. Condivi tells us that books were to Michelangelo "a dull and endless strife." He was very often dreadfully beaten—as the artist tells it himself, *bene spesso stranamente battuto*—for wandering in the workshops of artists instead of going to school, or sketching for himself instead of studying his books.

His father had intended that his son should go into the silk and woollen business. When he discovered his artistic proclivities, of course he forbade such foolish waste of time and punished the lad severely. It seemed a disgrace that a member of the respectable Buonarroti family should take up so non-lucrative and little-considered occupation as that of a painter on canvas and worker in marble. There was the usual result. Michelangelo could not overcome his native genius, and after some trying scenes his father finally consented to permit him to enter the studio of Domenico Ghirlandajo, who was at the moment the most distinguished painter in Italy. It was not long, moreover, before Angelo was correcting his master's drawing. At first Ghirlandajo was disturbed by this, but he was won inevitably by the distinction of Angelo's work until one day he declared, though altogether Angelo was only a year in his studio, "this young man knows more of art than I do myself." Then he was given a place in the Academy of Lorenzo de' Medici, Ghirlandajo having been asked to nominate two of his best pupils for the Academy and selecting as one Angelo. Surely this selection proved that the teacher was not, as some have said, jealous of the pupil.

At Lorenzo's academy Michelangelo came in contact with some of the most distinguished men of Italy of that day. There were Lorenzo's two sons, Giovanni and Giulio, who afterwards became Popes Leo X and Clement VII; Pico della Mirandola, the poet and scholar; Politian, the poet, classicist and philosopher; Ficino, the head of the Platonic academy at Florence of that day, and Bibbiena and Castiglione, the latter subsequently the author of the famous book "*Il Cortigiano.*" The two last-named were Raphael's great friends when a few years later he was studying in Florence. It is not surprising that under these circumstances Angelo became very much interested in antique sculpture, nor that his first independent work was a bas-relief, representing a battle between Hercules and the Centaurs. This is still preserved in the Casa Buonarroti, and with its crowded figures reveals the genius and the assured artistic grasp of the future great sculptor who executed it.

Angelo, however, soon realized that if he was to do sculpture successfully he must study not only the outside of the human body and the antique sculptures, but he must know all the structures of the body. Accordingly he had dead bodies conveyed from the hospital to a special room provided for him in the convent of Santo Spirito, and dissected them carefully. It has often been said in the modern time that at this period dissection was forbidden by the Church, but there is absolutely no trace of any such legislation, and every artist of the latter part of the fifteenth century did dissection. Michelangelo rewarded the prior of the monastery for his help in these studies by carving for him a crucifix out of wood, which revealed the benefit derived from his dissections. With such zeal for art it is not surprising that the young man soon found himself capable of doing sculpture of great artistic significance. We have traditions of a statue of " Hercules," a high relief of the " Madonna " and a " Sleeping Cupid," which had an eventful history. A dealer buried it in the earth for a time and then sold it as an antique. Cardinal Riario, who purchased it, finding out the trick, invited the sculptor, who knew nothing of the deception, to Rome, and some of his first important work was done there.

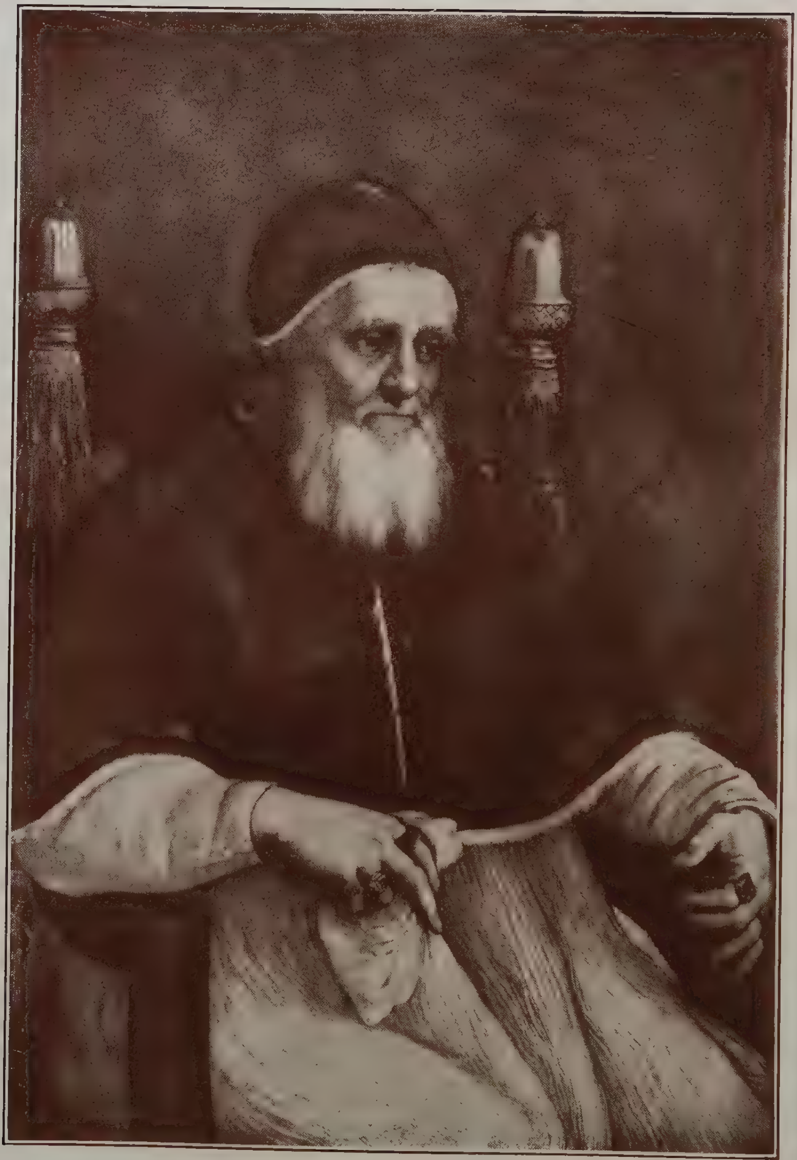
His earliest Roman work was of antique subjects, a " Cupid," which has been lost, and a " Bacchus," now in the Bargello. His first great commission, however, came from the Cardinal de St. Denis, the French Ambassador at Rome. This was of a " Madonna " with the dead Saviour on her knees, just after His taking down from the Cross. The group is now in St. Peter's at Rome, and though executed when Michelangelo was less than twenty-five years of age, has come to be looked upon as one of the great sculptures of the world. Copies of it are now to be seen in most of the important museums, so that a good idea of his youthful genius can be readily obtained by anyone desirous of knowing it.

Some critics have objected that the " Madonna " in the group is entirely too young to be the mother of the dead son, who lies across her knees. Michelangelo's own answer to that objection is, of course, the only one that will interest those who love the group and would like to know just his meaning. We have it from Condivi, to whom Michelangelo confided it:

"Don't you know," he said, "that chaste women keep their youthful looks much longer than others? Isn't this much more true in the case of a Virgin who had never known a wanton desire to leave its shade upon her beauty! . . . It is quite the contrary with the form of the 'Son of God,' because I wanted to show that He really took upon Him human flesh, and that He bore all the miseries of man, yet without sin."

The "Pietà" is probably one of the supreme sculptures of all time, but Michelangelo's next important work was to place him beyond all doubt in the rank of world sculptors. This was his "David." It is all the more interesting because of the difficulties under which he executed it. A huge block of marble of the finest vein lay in the works at Santa Maria del Fiore, Florence, which several sculptors had designed to make use of and at least two or three had begun work on, but then had given up. Michelangelo saw it and saw in it the possibilities of a heroic statue. He offered his design, it was accepted by the authorities, and he set to work. He built a workshop on the spot and shut himself up for eighteen months, absolutely refusing to let anyone see his work. The result was the "David" so well known. A copy of it was afterwards made in bronze and may be seen on the hill above Florence. It has often been said that the difference in impressiveness between the bronze and marble statues shows how much better adapted marble is for the expression of the human figure. The triumph of the artist, not only in the execution of this triumphant expression of youth, but also over the strict limitations of his materials, shows the eminently practical genius of the man who, at the age of thirty, was able to accomplish such a work.

After these great sculptures, Michelangelo entered into a competition in painting and was chosen as a rival of Leonardo to decorate one side of the Council Hall of the Signory. Leonardo was already at work when Michelangelo received his



RAPHAEL, POPE JULIUS II

commission. Unfortunately neither of the paintings was ever completed. Only a portion of Leonardo's cartoon remains for us, though Michelangelo's, representing some Pisan soldiers surprised by Florentines while bathing in the Arno, is now at Holkham Hall in England and has been well engraved by Schiavonetti. This cartoon was the subject of much study by contemporaries, and Raphael particularly was greatly influenced by it.

After this work Michelangelo was summoned to Rome by Pope Julius II and commissioned to make that great tomb which occupied so much of Angelo's attention for the next quarter of a century, caused him so many difficulties and disturbances of mind and was destined eventually to remain unfinished or at least to be of nothing like the significance that was originally planned. If one looks a little into Michelangelo's life at this time, surrounded as he was by the jealousies of his colleagues, disturbed at his work by political animosities of various kinds, by the slights of those who failed to appreciate and the open envy of those who favored his rivals, some idea of the difficulties of his artistic soul will be understood.

In the midst of his preparations for the making of the great tomb of Pope Julius, for which he spent nearly a year in the quarries up at Carrara obtaining the proper kind of marble and working out three or four statues while the men of the quarries were getting out the other marble that he wished, the execution of the tomb was put off. Fortunately the work done at this time was not entirely lost. The two galley slaves at the Louvre, which are among the greatest sculptures of their kind ever made, attest Michelangelo's industry, as well as genius, and they have been favorite studies of artists of all kinds ever since.

When the execution of the tomb was put off Michelangelo was summoned to paint the vault of the Sistine Chapel. It is said that he owed this commission to the jealousy of rivals who hoped to discredit him. The Sistine Chapel is a most difficult room for effective decoration, since it is simply an oblong box with a low-vaulted ceiling. It was this ceiling that Michelangelo was supposed to decorate in fresco. He refused at first to accept the commission, saying that he was no fresco painter, but the Pope insisted. For over three years, except when eating and sleeping, he was hidden behind the scaffolding, lying on his back most of the time painting above him, so that he could not read without placing his book above his head after a while. When the scaffold was taken down, the triumphant manifestation of his genius revealed one of the most superb monuments of art that the world possesses.

As Grimm says, " If a man wants to get an idea of the art of Giotto and his pupils, architecture and painting together, he must go to the Campo Santo at Pisa; if he wants the masterpiece of the following art period, the extensive development that lies between Masaccio and Michelangelo, he must go to the Sistine Chapel."

Fortunately for the after-time it is one of the few great decorative works of this time that can be studied as the artist left it, or at least without having to make allowance for the well-meant additions of restorers. The ceiling of the Sistine Chapel has been sadly injured by smoke and by water percolation from the roof and it has faded somewhat with time under the conditions of use of the chapel, but it has been spared from the misguided efforts of men by its position. A great Pope is said to have said, " There are two ways of ruining a work of art, by destruction and by restoration." He might well have added, especially in the light of what has happened even in the Vatican to Raphael and others, " and of the two the latter is the worse." From this Michelangelo's great work has happily been saved, and as a result it remains even in its damaged condition one of the acknowledged triumphs of human art, undoubtedly the greatest decorative work that has ever been done since the time of the Greeks.

Some of Michelangelo's greatest work was done for the Julian tomb, and the triumph of his genius at this time is the " Moses," which was to have been one of four prophets that were to have found a place on the monument. It would not be difficult to collect some of the most effusive expressions of artistic enthusiasm over the " Moses." Men who are themselves great sculptors have declared that it is the triumph of man's power over marble. It is extremely difficult, artists have declared, to give a work in marble a decided facial expression, yet Michelangelo succeeded in doing it in the " Moses," but, as has also been said, every portion of the statue partakes of this wonderful power that he had of making it profoundly expressive. Men whose opinions are valuable because of their own significant work have been unstinted in their praise of the now famous knee of the statue and the wonderful way in which the foot of the right leg rests upon the ground. All these are but details, however. One must have seen the statue many times and have had its meaning in every part grow by repetition of impression, and then something of the wonderful genius of its sculptor comes home to the beholder. We cannot but regret that Michelangelo was not permitted in peace to finish the great tomb as he had planned it, for with the " Moses " as an example we would surely have had in it the greatest triumph of modern genius in sculpture, if not indeed of all time.

This is probably one of the most striking figures ever made. It has made the Church of San Pietro in Vincoli, in which it is, a place of pilgrimage for artists from all over the world, and for all those interested in art ever since. Michelangelo has taken the moment when Moses, descending from the Mount with the tables of the law in his hands, sees before him the procession of the Golden Calf. In Exodus it is said, " he waxed hot with wrath." Moses has just come from communion with the Most High, and his wrath is tempered and sublimated by religious enthusiasm and by the majesty which the consciousness of his high mission imparts to him. Every portion of the statue breathes with the wrath of justice, yet with the sublime feeling of the awfulness of the crime that has just been committed against the Most High and that His servant must pitilessly condemn.

And yet, had the artist been allowed to work on uninterrupted at the Julian tomb, we might have missed some or all of the great work that he accomplished under the direction of the Medici Popes in Florence. While the " Moses " is looked upon as the finest expression of his powers in mature years, as the " David " is of his younger life, there are good critics who have not hesitated to say that Michelangelo's most interesting work is to be found in the series of statues the very consummation of the sculptor's skill which are in the sacristy of San Lorenzo. There are four allegorical figures, "Dawn and Twilight," "Day and Night," which recall the principal phases and the rapid course of man's destiny, in which Michelangelo has expressed in imperishable marble his thoughts with regard to life and its significance. There are, besides, two statues of the "Medici," one, that of "Lorenzo"—not the great Lorenzo, but his son—and the other, "Giuliano," the younger son of il Magnifico. So little are these considered, however, now as portrait statues of the Medici that one of them is known as *il pensiero,* the thinker, and its fellow is likewise thought of as expressing an ideal rather than a person. Michelangelo himself had said that in a hundred years no one would care whom these statues represented, so looking through the temporal with a great artist's vision they became in his hands symbols of immortal moods of humanity.

Michelangelo's crowning work of a great lifetime came in his later years when he devoted himself to architecture. In this department of art he was as great as in any other and probably greater than anyone who had ever preceded him. Some of his smaller works, as the "Porta del Popolo" and the twin churches near it, are admirable in themselves, yet simple and admirably suited to their surroundings. Millet once said that the essence of beauty in art consists in the adaptation of truth so as to suit the conditions. The triumph of Michelangelo's architecture came in the great dome of St. Peter's. As the great basilica was unfortunately finished in the after-time, no proper conception of this can be obtained from the plaza of St. Peter's. Close up only from the roof of the great Church itself does one get a true idea of its marvellous beauty and stupendous size. It was intended, of course, to be seen from a long distance, and when thus seen it stands out with wondrous effectiveness. In the old days, when men came in carriages over the mountains to Rome, the Dome of St. Peter's was the first thing to be seen from twenty miles away, and, thus seen, profoundly impressed the beholder. From Tivoli, for instance, when nothing else is visible above the horizon except Michelangelo's mighty dome, and all of Rome, even on her seven hills, is lost to sight, its stupendous size and wondrous charm can be properly appreciated. It then appeals to the beholder not as a work of man, but seems more like some great natural wonder from the hand of the Creator Himself.

How Michelangelo succeeded in building it with the materials that he had at hand, with the assistance—material and personal—that he could command, and in spite of all the obstacles that were placed in his path, the misunderstandings, the jealousies, the petty rivalries of smaller artists, is indeed a wonder. Some of his biographers have been astonished that he should have known enough of mathematics to be able to plan and construct it properly. They frankly confess that he had no opportunity as a young man to make the mathematical studies necessary for such work and apparently forget that whenever Michelangelo would do anything he somehow found in himself the power to accomplish his purpose with absolute thoroughness. He had set out to put the Pantheon above St. Peter's tomb, and he succeeded in his ambition, for the great dome, though it does not begin to curve into a dome until it is more than a hundred feet above the pavement, is somewhat larger in diameter than the great vault of the Pantheon, the triumph of Roman power to build, which had been hailed as one of the wonders of the world.

One further phase of Michelangelo's accomplishment must be mentioned. This greatest of sculptors, boldest and most successful of architects and finest of decorative painters, was also one of the greatest of poets. "Four-souled" is the apt epithet that has been coined to express this versatility. It has been said that only Dante and Shakespeare have equalled him in the writing of sonnets, and there is no doubt at all that he is one of the most important contributors to Italian literature, even in the glorious Age of Leo X. Addington Symonds declared his sonnets to be the rough-hewn blocking out of poems rather than finished works of art, and the great Italian critic, Bembo, declared "he says *things,* while other poets say words." His friend and biographer, Condivi, said, "he devoted himself to poetry rather for his own delight than because he made a profession of it, always depreciating himself and accusing his ignorance." His poems were scribbled on the backs of old letters or drawings or other papers that chanced to be around, and only occasionally copied and sent off to his friends. Although often urged by his friends, he would never consent to make any collection of his poems during his lifetime. Many of them were faithfully preserved, however, and of some of them the various readings and corrections show that his artistic sense would not allow him to let things go from him without, to some extent at least, giving them a form worthy of the thought.

Nowhere can one find the character of Michelangelo better expressed than in his sonnets, and there is a deep religious vein in them which reveals the profound belief of this greatest of men in all the great truths of Christianity and his sense of personal devotion to the Creator and his dependence on Him and the necessity for doing everything for Him that is extremely refreshing. For Michelangelo this was the solution of the mystery of life.

Perhaps the best idea of his sonnets can be obtained from his lines on Dante. It had come to be the custom during the Renaissance to think that the only literature worth while thinking about was the classical, and above all Greek, and that the Middle Ages had produced nothing of significance in art or letters. Even Dante was not thought to be a great exception to this rule, though it was admitted that he stood far above his contemporaries. The word Gothic, as applied to the architecture, the art and the literature of these rude ancestors, the descendants of the Gothic barbarians, was invented by the critics of the Renaissance to express to the full their contempt for the products of the earlier period. Michelangelo had no illusions with regard to comparative values. Above all he recognized the surpassing character of Dante's poetry. His sonnet tells the rest and sympathetically insists that he would have been willing to have borne even Dante's years of suffering and exile to produce such marvellous poetry.

"Into the dark abyss he made his way;
Both nether worlds he saw, and in the might
Of his great soul beheld God's splendor bright,

And gave to us on earth true light of day:
Star of supremest worth with his clear ray,
  Heaven's secrets he revealed to our dim sight,
  And had for guerdon what the base world's spite
Oft gives to souls that noblest grace display,
Full ill was Dante's life work understood,
  His purpose high by that ungrateful state,
That welcomed all with kindness but the good.
  Would I were such, to bear like evil fate,
To taste his exile, share his lofty mood!
  For this I'd gladly give all earth calls great."

The bitter rivalries and jealousies that surrounded him have sometimes produced the impression that Michelangelo must himself have been of a carping disposition, not ready to acknowledge the merits of other artists, though it is felt in extenuation, as it were, that in this he only shared the spirit of the time. Any such impression would be quite unjustified by what we know of Michelangelo. His admiration for the ancients was unbounded. It was he who, when they were first excavated, stepped up to the horses that are now on the Capitoline in Rome, and patting one of them on the back said "get up," as if they seemed to him so true to life that they ought to walk off. A single paragraph from the sketch of Michelangelo in the Artists' Biographies * will show how thoroughly he appreciated some of his immediate predecessors:

"Angelo was a great admirer of the three famous Florentine artists who had preceded him. Of Ghiberti's 'Gates to the Baptistry,' he said, 'They are so beautiful that they are worthy of being the gates of Paradise.' Standing before Donatello's statue of St. Mark, he cried out, 'Mark, why don't you speak to me?' and on another occasion he said, 'If St. Mark looked thus we may safely believe what he has written.' When he was advised to vary the lantern on the Medici Chapel from that which Brunelleschi had built on the old sacristy of San Lorenzo, he remarked, 'It may be varied, but not improved.' Of other artists he spoke no less pleasantly, saying of Gentile da Fabriano that his name corresponded with the grace of his

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* Houghton Mifflin, Boston, 1878.

style; and of Cesari's medals, that 'art has reached its last hour, for beyond this it cannot go.'"

If there ever was a man who had a right to pride himself a little on his powers and his achievements, surely it was Michelangelo. He had succeeded in bodying forth thoughts too deep for words in every mode of human expression, even making words serve his purpose greatly though inadequately; men of genius had so admired his work and been influenced by it that all during life he had that sincerest of flattery, imitation, from men who themselves were among the notable geniuses of his generation, yet it was he who, in his sonnet towards the end of his life, begged pardon of his God if he had ever used his powers as if they were his own and not for the glory of the Creator who had given them. We have any number of stories of his patient study of art and architecture, even until the end of his life. Once Cardinal Farnese met him, when he was past sixty, in solitary contemplation amid the ruins of the Coliseum. To his question as to why he was there and alone, Angelo replied, "I am still at school taking my lessons so that I may continue to learn." He once drew a picture of an old man, somewhat resembling himself, seated in a child's carriage with the motto, "I still learn."

His anatomical studies begun in his early youth at Florence were never given up, and when other subjects were lacking he dissected domestic animals and above all welcomed the opportunity to dissect several horses. Dürer in Germany and Da Vinci in Italy had been faithful dissectors, and Michelangelo kept up the tradition.

The personality of this greatest of geniuses that the world has ever known can scarcely fail to be interesting. Michelangelo is the true type of one of the greatest periods of human history, and as such every detail of his life appeals to men. Like many great geniuses, Michelangelo was what is called a handy man, that is, one who could fashion implements and objects skilfully with his hands. It is said that all through his life he preferred not to entrust the making of the implements of his art to any other hand. He used to make his own chisels, files, and piercers and to mix his own colors. Even to an advanced age he continued to use the chisel for himself and was ever famous for his audacious skilfulness with it. At the age of sixty he is described as bringing down more scales from a very high block of marble in a short time than three young marble-cutters could in three or four times that space. With a single blow, Vigenero described him as bringing down scales of marble three or four inches in breadth and with such precision to the line that if he had broken away, even a very little more, he risked the ruin of his work.

How lonely he was in the midst of all his great work, and how many material difficulties there were to weigh on his spirit and keep him from intoxication with that joy of the artist in accomplishment, which might even have hurt the work or at least the striving of even so great an artist as he, can be very well understood through quotations from some letters to his father, in which, not querulously, but as if needing someone as a confidant, he pours out his inmost feelings:

"I stand here in intense anxiety and with the greatest fatigue of body. I have no friends of any sort, nor do I wish any; and I have not time enough to eat what is needful. Let no more annoyances be added to me, for I cannot bear another ounce." In the summer of 1508 he wrote, "I am sick at heart, ill, and worn out with fatigue, helpless and penniless." A year later he wrote again: "The Pope has not given me a groat for a year; and I do not ask for it, for I feel that I have not merited it, and this because painting is not the sort of work which is my profession. And yet I waste my time without fruits—God help me!"

Michelangelo's views with regard to matrimony are well known. To a priest who asked him one day why he never married he said, "I have a wife who is too much for me already; one who unceasingly persecutes me. It is my art; and my works are my children." And yet his tenderness of soul and his affection for children was not eclipsed by his absorption in his art, for Grimm tells the story of a child stopping him on the street and asking him to make a drawing, and the artist took the sheet of paper offered him and fulfilled the wish.

When Michelangelo was an old man of seventy-five, however, he was ready to give advice to his grandnephew Leonardo in the matter of marriage. That advice is interesting from a good many standpoints, but especially because Michelangelo thought that the choice of a wife was something to pray and ask for special aid from on High about:

"Leonardo, I wrote thee about taking a wife, and told thee of three girls which have been here mentioned to me. . . . I do not know any of them, and cannot say either good or evil of them, nor advise you about one more than the other. . . . Giov. Francesco might give you good advice; he is old and knows the world. [Michelangelo himself was seventy-five years young at this time.] Remember me to him. Above all, seek the counsel of God, for it is a great step. Remember that the husband should be at least ten years older than the wife, and that she should be healthy." Again he wrote, "Leonardo, I sent thee in my last a note as to marriageable girls, which had been sent me from Florence. . . . Thou needst a wife to associate with, and whom thou canst rule, and who will not care about pomps, and run about every day to parties and marriages. It is easy for a woman to go wrong who does these things. Nor is it to be said by anyone that thou wishest to ennoble thyself by marriage, for it is well known that we are as ancient and noble citizens of Florence as those of any other house. Recommend thyself to God and He may aid thee." *

The great artist did not escape the disturbing cares of family life by his bachelorhood, however, for it became the custom of his brothers to turn to him for aid whenever there was trouble. His family had objected to his becoming a sculptor because it was beneath the dignity of their nobility, but now that he was successful they were quite willing to use his money freely. He had a scapegrace younger brother who was particularly a thorn in his side, ever getting into trouble and being helped out, above all constantly demanding money. Michelangelo once wrote to him while he was at work on the great ceiling of the Sistine.

"If you take care to do well, and to honor and revere your

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* It may be interesting to know that the grand-nephew did take a wife, one of those recommended by his grand-uncle, and that Michelangelo dictated the names of the children, often went to see them, loaded them with presents and was their mother's best friend and confidant.

father, I will aid you like the others, and will soon establish you in a good shop. . . . I have gone about throughout all Italy for twelve years, leading a dog's life, bearing all manner of insults, enduring all sorts of drudgery, lacerating my body with many toils, placing my life itself under a thousand perils solely to aid my family, and now that I have commenced to raise it up a little, thou alone wishest to do that which shall confound and ruin in an hour everything that I have done in so many years and with so many fatigues."

Michelangelo's letters of consolation to his brother's (Leonardo's) daughter, who was delicate and ailing, show how tender were his family affections. He has sometimes been pictured as the self-centred bachelor, occupied only with his art. Any such picture of him is but one of the many one-sided false impressions of these geniuses of the Renaissance, all of whom, when known intimately, prove to be whole-hearted human beings with all the human interests deeply developed.

One of the most interesting incidents in Michelangelo's life is his association with Vittoria Colonna. This is one of the most charming episodes of platonic friendship with wonderful mutual influence for good chronicled in history. Vittoria was an inspiration to Michelangelo in his work, and his tributes to her are full of the loftiest admiration and almost saintlike worship. On the other hand, no one could have held a higher place in the esteem of Vittoria than Michelangelo. She had suggested the subjects for certain pictures and Michelangelo painted them. She wrote in thankfulness and said with regard to one of them:

"I had the greatest faith in God, that He would give you a supernatural grace to paint this 'Christ'; then I saw it, so wonderful that it surpassed in every way my expectations. Being emboldened by your miracles, I desired that which I now see marvellously fulfilled—that is, that it should stand in every part in the highest perfection, and that one could not desire more nor reach forward to desire so much. And I tell you that it gave me joy that the angel on the right hand is so beautiful; for the Archangel Michael will place you, Michelangelo, on the right hand of the Lord at the Judgment Day. And, meanwhile, I know not how to serve you otherwise than to pray to this sweet 'Christ,' Whom you have so well and perfectly painted, and to entreat you to command me as altogether yours in all and through all."

This friendship of Michelangelo and Vittoria has become so celebrated that to many it may seem that time has woven a romantic halo around it, far transcending the reality. Only a little study of contemporary documents, however, is needed to show that the facts are interesting beyond even the stories that are told. Modern biographers have enriched the tradition with many details, and Grimm has given a most beautiful picture of this most famous of friendships between man and woman which reflects so much honor on both the participants. Nothing that I know contradicts so many false notions as to the Renaissance that are widely disseminated and that are only too often taken as a criterion of modes of thinking and of conduct in this period. All the so-called Pagan tendencies of the Renaissance are contradicted by it.

Condivi, Angelo's pupil, who wrote about his master during his master's lifetime and who was intimately associated with him for many years, pays an affectionate tribute to Michelangelo's purity of mind and speech. The great master was a model of magnanimity, and Condivi says:

"I have often heard him speak about love; and others who have listened to him on this subject will bear me out in saying that the only love of which he spoke was the kind which is spoken of in Plato's works. For my part I do not know what Plato says, but one thing I, who have lived with him so long and so intimately, can assert, that I have never heard any but the purest words issue from his mouth."

He was one of the most abstemious of men. He literally thought nothing about creature comforts. Often he would take a piece of bread in his hand while at his work and that would be all during the course of a long day. His meals were likely to be irregular, and he paid very little attention to them. As for his sleep, he was noted even among the strenuous livers of his time for his ability to work without sleep and for the small amount that he took. When he was deeply interested in some work he would lie down in his clothes, and after a few hours get up to work again. The surprise is that he should have lived to the age of nearly ninety under such living conditions, but work never kills, and if the original vitality is extensive men live on to the limit of existence much better by consuming their energy than by allowing it to react within them, as it so often does. Some repentant expressions of his had been taken to indicate, be it said by modern writers, never by his contemporaries, that he was of a passionate nature and had given rein to his impulses in youth. Except these words of repentance, however, which are rather conventional in his time and indicate a falling below ideals rather than actual serious faults, we have absolutely no evidence. On the other hand, we have some expressions of his which indicate how much difficulty he found in curbing his passions in youth and how glad he is that he used the effort, since it saved him from regrets in after life.

The thought of death was a favorite one with him, and he seems frequently to have dwelt on it and to have considered that there was no thought that was better for a man. Not only did it prove chastening, but above all it helped a man to eliminate the quest of the trivial and the merely selfish in life. He held the thought of death as the only consideration that makes us know ourselves and saves us from becoming a prey to kindred, friends or masters, to ambition, and to the other vices and sins which rob a man of himself. That was his main purpose in life, to live it for accomplishment and not merely for the trifles which easily satisfy so many men. Whenever he was tempted to permit himself to derogate from his highest aims in life for the sake of the distinction of the moment, the thought of death was sobering, and the time when the darkness cometh and no man can labor brought him back to his best work, no matter what the difficulties might be in doing it.

Angelo's relation to religion is all the more interesting because it is often said that the great men of the Renaissance, because of their profound study of pagan antiquity, had become touched with paganism. There is not a trace of this in Michelangelo, however, and surely he must be considered as the typical great man of the Renaissance. All his life he had thought of his relation to his Creator and of the necessity for accomplishing work, not for himself alone nor for selfish purposes, but with great aims that would be worthy of the talents that had been given him. Once, when he was having great difficulties because of opposition to his plans and interference with designs that he felt must be carried out, he said to Pope Paul III, "Holy Father, you see what I gain; if these fatigues which I endure do not benefit my soul I lose both time and labor." The Pope, with whom Michelangelo was a great favorite and who loved above all his sincere, straightforward simplicity and his deep feeling of religion, laid his hands paternally on the great artist's shoulders and said, "Have no doubt. You are benefiting both soul and body."

Toward the end of his life his mind became more and more occupied with religious thoughts, and there was a charmingly simple piety that he cultivated. This had been expressed often before in his great works of art, both paintings and sculptures, and still more clearly in his sonnets. Some seem to think that an artist, because of his occupation, may express beautiful thoughts on religious subjects, even though he does not feel them. Somehow it is supposed to be the artist's business to work himself into such moods and then express them, as if it were possible to express greatly in art, what one does not really feel. Most people, however, seem to think that formal expression in *words* must mean more in such matters, and for them Michelangelo's sonnets will doubtless be proofs of his absolute sincerity in religious matters. Towards the end of his life most of his poetry is deeply religious in character. He sent two sonnets to Vasari when he was about seventy-five, as he told the biographer "that you may see where I keep my thoughts." A more lofty expression of Christian humility and the spirit of prayerfulness has perhaps never been made. One of them, because it expresses his recognition of the fact that the trifles of the world had carried even him away, that *fascinatio nugacitatis quæ obscurat bona* of the Scriptures, is worth quoting as a summation of his religious life and feelings:

"The fables of the world have filched away
The time I had for thinking upon God;
His grace lies buried 'neath oblivion's sod,
Whence springs an evil crop of sins alway.

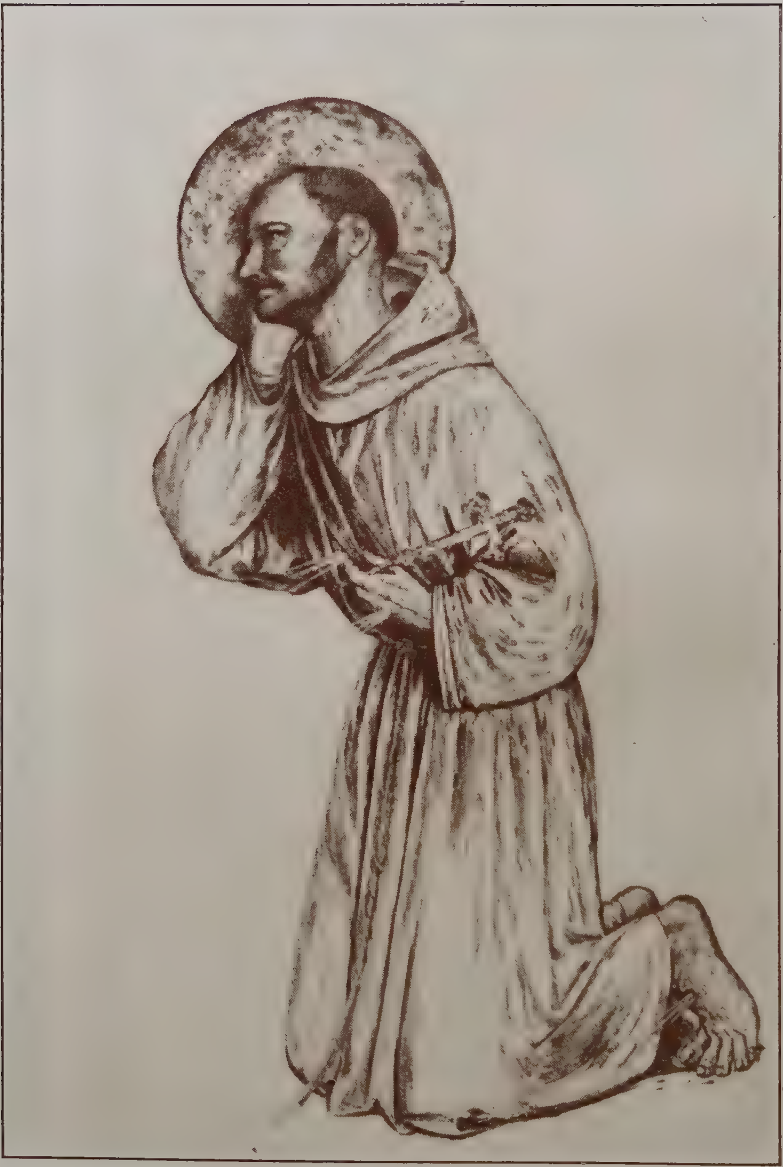
What makes another wise, leads me astray,
Slow to discern the bad path I have trod:
Hope fades, but still desire ascends that God
May free from self-love, my sure decay.
Shorten half-way my road to heaven from earth!
Dear Lord, I cannot even half-way rise
Unless Thou help me on this pilgrimage.
Teach me to hate the world so little worth,
And all the lovely things I clasp and prize,
That endless life, ere death, may be my wage."

Angelo's last work in sculpture was a group very like his first great religious group, the "Pietà." It consisted of the Blessed Virgin with the dead Christ and two other figures. Only the "Christ" was ever finished. His intention was that this group should be placed on an altar over his tomb, but his wish was never fulfilled. The circumstances of his work at it are interesting. Like many an old man, he often found himself wakeful at night and needed something to occupy his thoughts. When he arose this way he used to work in solitude and silence at these figures with loving recollection and care and with the thought that it would be his monument after death. He had come to look upon death rather as a friend than an enemy, saying once that "life, which had been given to us without our asking, had wonderful possibilities of good in it, and death, which came unsummoned from the same Providential hand, could surely not prove less full of blessing."

Towards sunset on the eighteenth of February, 1564, Michelangelo turned to his friends and said, "I give my soul to God, my body to the earth and my worldly possessions to my nearest of kin, charging them through life to remember the sufferings of Jesus Christ." In making a will some years before, he left as alternative heir the Church, on condition that the "income was to be given for the love of God to the modest poor."

While Leonardo da Vinci was indeed a universal genius well deserving of the high title, it must not be forgotten that the age in which he lived was the age of Michelangelo. The "divine master," his compatriot artists have loved to call him ever since his own day. It is probable that he must be conceded to have carried human nature as far in its power of expression of the beauty and truth of life as any man that ever lived. The divine in human nature nowhere shines out so conspicuously as in Michelangelo's achievements. There was no form of art, no mode of expression, no field of thought in which he did not excel. It must be confessed that his thoughts were often too high and too deep for human nature's limitations, and that he did not always succeed in completing his work in such a way as he himself would have wished, and above all such as would have made it thoroughly comprehensible to ordinary mortals. His works give us a better idea of human nature's possibilities, yet Vittoria Colonna, who knew him so well, declared that those who admire Michelangelo's works admire but the smallest part of him. She had come to realize how much more there was in him than even his works made manifest. Often the artist is a disappointment after his works. Michelangelo's personality made one disappointed with his works as if there should be much more in them.

As his contemporaries knew him then, he was, if possible, greater than he is revealed to us in his works. Probably no larger man in all the best sense of that term has ever lived, painter, sculptor, architect, poet, simple, humble, devout, in friendship a model, as a teacher deeply beloved—this man, who succeeded so marvellously in everything that he attempted, is one of human nature's proudest boasts, yet himself realized poignantly how little he could really accomplish of all that surged up in his soul. No career in history so makes it clear that the breath of the Creator is in His creatures to inspire and exalt. How deeply a creature may influence his kind, Michelangelo illustrates as perhaps no other. There are certainly not more than a few chosen spirits to be numerated on the fingers of one hand whom we think of in the same breath with him when we count up man's beneficent geniuses, and we can scarcely foresee an end to that influence apart from the complete destruction of our modern civilization. As Grimm said at the end of his sixth edition of Michelangelo's life, "It is not thinkable that the influence on the artistic work of mankind which has proceeded from him should not continue to wax with the course of time."



FRA ANGELICO, ST. FRANCIS

CHAPTER IV

SECONDARY ITALIAN PAINTERS OF THE CENTURY. FRA ANGELICO, PERUGINO, FRA BARTOLOMMEO, BOTTICELLI, BELLINI, TITIAN, CORREGGIO, TINTORETTO, VERONESE AND OTHERS

Perhaps nothing illustrates better the wealth of genius in what we have called Columbus' Century than the fact that after detailed accounts of the lives of Raphael, Michelangelo and Leonardo da Vinci, many painters of the first rank still remain to be treated of in the second place, as it were, a number of them exhibiting some quality that has given them an almost unique distinction in the history of art. Some of these great painters are acknowledged to be among the most distinguished artists of all time. When it is realized that men like Fra Angelico, Perugino, Botticelli, Titian, Correggio, Tintoretto and Veronese have to be grouped together in a single chapter, the necessities of compression in our account of the century will begin to be appreciated. Each of them deserves, for any adequate presentation of his work, not a few paragraphs, but a large volume, and about each of them indeed not one but many volumes have been written even centuries after their deaths. It must not be forgotten that almost the same abbreviation of the story must be made for any other phase of the century's achievements.

When Columbus' Century opened, Fra Angelico had just been summoned to Rome to set about what has usually been considered the crowning labor of his life. This was the painting in fresco of the walls of the small oratory in the Vatican, since known as the chapel of Nicholas V, because the decoration of it was ordered by that great pontiff, a man of deep scholarship and an enlightened patron of the fine arts, whose aim to make Rome not only the centre of the religious life, but also of the best influences for art and science for all the world, has come to be well recognized. Artists and art critics have been almost fulsome in their praise of these decorations of Fra Angelico. The walls were covered on three sides with two series of paintings, the upper portion illustrating the life of St. Stephen, the lower that of St. Lawrence. That two sets of subjects so similar should have been treated in close juxtaposition without any repetition in design or composition is in itself the best possible evidence of the artist's power and his constructive imagination. The designs show a freshness of conception very remarkable in a man of advanced years, yet withal there is absolutely no falling off in the power and sincerity of his art, and if anything a deepening of the religious feeling so characteristic of him. When he did this work he was probably past sixty-five years of age.

Fortunately in our day, when it is so easy to obtain cheap reproductions of the works of all the great painters, and when copies in color of Fra Angelico's paintings may readily be secured, anyone may know for himself something at least of the sweetness and power of this charming painter of the early Renaissance. His Madonnas have a most taking motherly expression and yet are full of the mystic saintliness that becomes the Mother of God. His angels are a constantly-repeated argument and impelling appeal for the existence of these invisible creatures, which have been well declared to look so real as to be convincing. His pictures of Christ as man and boy are replete with humanity, and yet have the Divinity shining through the veils of flesh. No one but a man who believed firmly, completely and entirely in what he was painting could ever have given us these marvellous representations. It is easy to understand, then, that when it comes to his pictures of the saints Fra Angelico has given us, absolutely true to life, representations of them in various actions as their activities appeal to him. Among them he has introduced some portraits of his friends, thus laying the foundation of that portrait painting which was to develop so finely in the next generation and which was fortunately to preserve for us the features of so many whom we would like to have known. In the meantime, in the background of his pictures he has given us the beginning of modern landscape painting in all the beauty and charm of his own, simple, single-hearted way of looking at the beauties of nature.

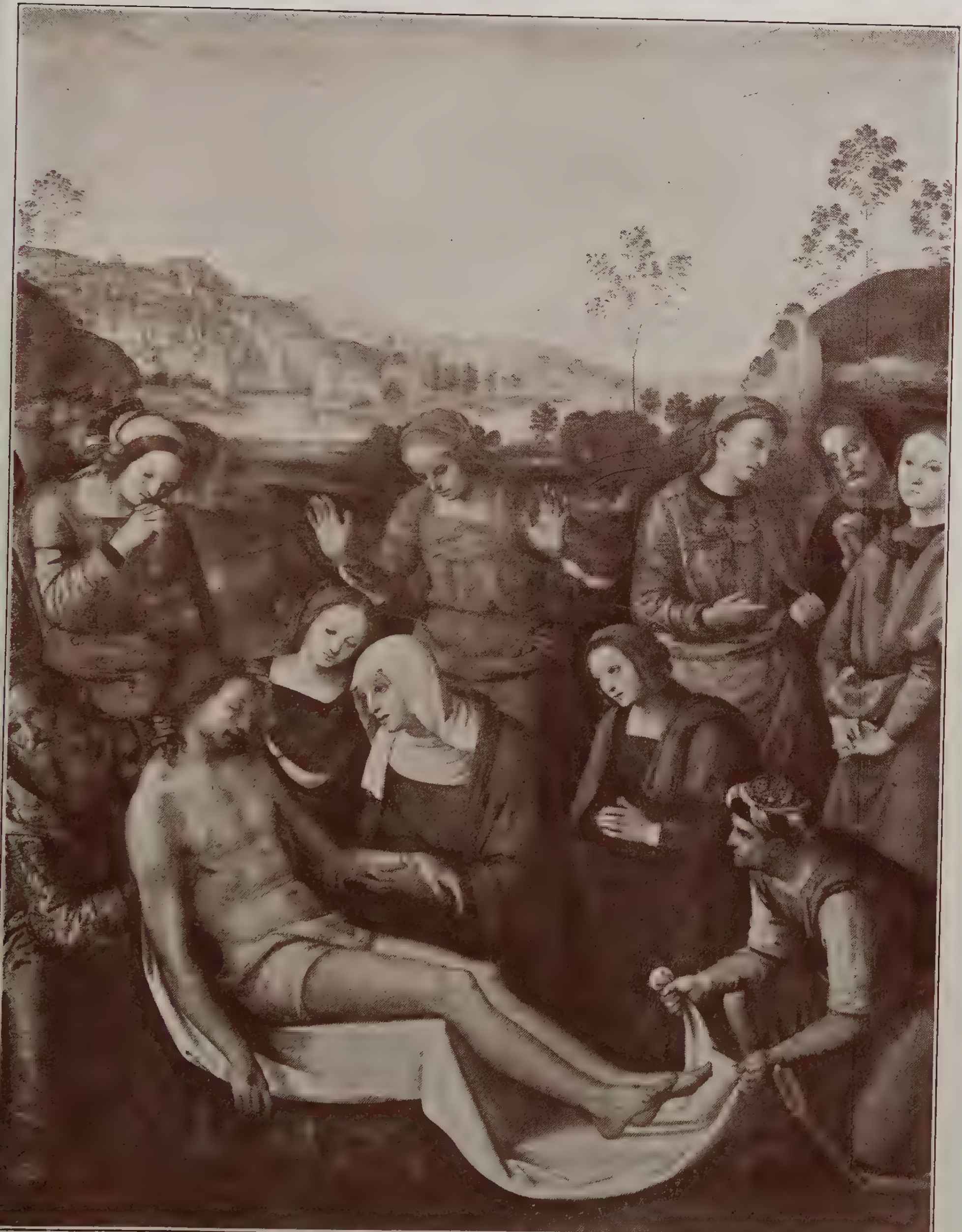
One of the most important of the Italian painters of the first half of Columbus' Century, all the more interesting because he was young Raphael's master, was Pietro Vannucci, whom, from the name of his adopted town Perugia, the world of art knows as Perugino. He was born just before the century began in 1447. His parents were poor, though not of low condition, and as a boy Pietro worked as a shop drudge with a painter in Perugia. There has been much discussion as to who this painter was, and probably the best determination is Niccolo da Foligno, who is sometimes considered the originator of the school of Umbrian painters, in which Perugino thereafter took so important a place. Niccolo was himself a pupil of Benozzo Gozzoli, who owed his training to Fra Angelico. There were other artists at Perugia under whose influence young Perugino came, and their names, when taken in connection with those already mentioned, will show the wondrous art influences abroad in the period. Vasari mentions also Bonfigli, known also as Benedetto Buonfiglio, whose work can be seen at its best only in Perugia and is well deserving of study, and Fiorenzo di Lorenzo, in whom the typical Umbrian landscapes, which are so important a feature in Perugino's pictures, first make their appearance. A still more important influence in Perugino's life was Piero della Francesca, who was perhaps at Perugia for a while, though Perugino may have met him elsewhere.

After his apprentice work in art at Perugia, Perugino travelled and was influenced by such men as Luca Signorelli, Lorenzo and the group of great painters then at Florence, including Ghirlandajo, Cosi, Moroselli and Botticelli, as well as the master Verrocchio, in whose studio, or rather workshop, Perugino probably came in contact with Leonardo da Vinci and also Lorenzo di Credi. There are two oft-quoted lines from Giovanni Santi, " two youths alike in age and love, Leonardo da Vinci and the Perugian Peter of Pieve." It was Perugino's merit to have reached distinction, even amongst these, and his religious pictures have a value all their own. After his years of training and journeying, Perugino had his opportunity at Rome, especially in the Sistine Chapel. Of his work there, Berenson said in his "Central Italian Painters of the Renaissance," "It is the golden joyous color and the fine rhythm of the groups and above all the buoyant spaciousness of this fresco that win and hold us." He has spoken of "the golden dreamy summerings" of his pictures in the Louvre, and especially "the round containing the Madonna with the guardian saints and angels, all dipped in the color of Heaven, dreaming away in bliss the glowing summer afternoon." Perugino's power to paint man "not as a mite against infinity, but as man should be in Eden, dominant and towering high over the horizon," has given him a place all his own. "It is this exaltation of human being over the landscape that not only justifies but renders paintings great."

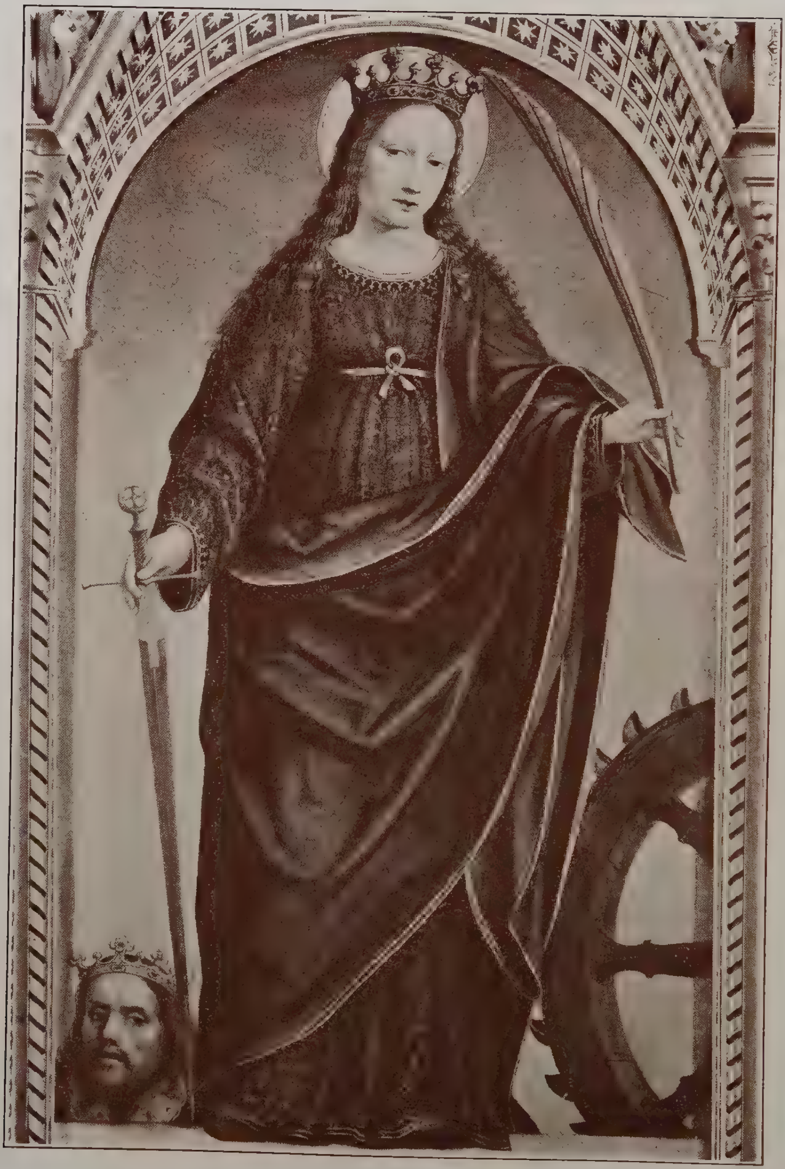
Grimm, in his "Life of Michelangelo," goes out of his way to say that "Perugino's work in the Sistine Chapel far surpasses the others, though they include such great men as Botticelli, Signorelli and Ghirlandajo. His simplicity, his symmetry, his thoughtful composition and finishing of individual figures, though in the others these are often in masses, scarcely to be distinguished, all these give a surpassing distinction to his painting."

Perhaps the greatest tribute to Perugino that has been paid by subsequent generations is the attribution to Raphael of some of the works that have since been determined to be Perugino's. "Apollo and Marsyas" of the Louvre, Paris, which has had its place in the Salon Carré for thirty years, is a typical example and is still called a Raphael in the Louvre catalogue, though now it has been almost definitely assigned to Perugino. Most of the important galleries of Europe have pictures that they value very highly that were done by Perugino, and mistakes with regard to his work have always been such as indicated the highest appreciation of Perugino, for they have been attributed to great masters.

One of the great painters of this time who, if he had done nothing else but influence Raphael deeply, would deserve a place in any account of the art of this century is Fra Bartolommeo. He was the intimate personal friend of Savonarola and painted the well-known portrait of the great preacher after



PERUGINO, ENTOMBMENT (PITTI)



BORGOGNONE, ST. CATHARINE OF ALEXANDRIA

the unfortunate execution of the friar. At a time when the Order of St. Dominic was very unpopular, Bartolommeo entered it in 1500, and for a time gave up painting.* He returned to his art, however, "for the profit of the Convent and the glory of God." Quite naturally he was very much influenced by the works of Fra Angelico, his brother, in religion, which were all round him in the monastery of San Marco, and also came under the influence of Leonardo da Vinci, who worked at Florence during the first decade of the sixteenth century. Bartolommeo had charge of the studio San Marco, and it was here that Raphael came in contact with him to the mutual benefit of both the painters, though Raphael was much the younger man. In 1508 Bartolommeo visited Venice and came under the spell of the rich coloring of Bellini and Titian.

Fra Bartolommeo's greatest works are probably the "Marriage of St. Catherine," "The Last Judgment," now in the Church of Santa Maria Nuova, Florence, the picture which is said to have attracted the attention of Raphael, and the well-known "Descent from the Cross," or as it is often called, "Lamentation over Christ," "in which the expression of suffering on the faces is charmingly differentiated for the various characters of St. John, the Magdalen and the Blessed Virgin, and so subdued that a heavenly peace illumines the group." It has been declared that Bartolommeo united the spirituality of Fra Angelico to the perfect treatment in form and color of Raphael, combined with a gentle gravity that was all his own and a devotion that was part of his life. The "Descent from the Cross" is one of his last works and, far from showing any sign of failing power, is masterly and firm. In anatomy and composition and color it is unsurpassed; in delicacy of feeling and religious devotion it is considered one of the great pictures of the world. His portrait of "Savonarola," a work of love on the part of an ardent disciple, is deservedly his best-known work and is one of the great portraits of all time, worthy to be placed beside those of such masters of portraiture as Bellini, Titian, Raphael and even Leonardo.

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*It is often said that it was fortunate that Savonarola's preaching did not continue to influence the Florentines deeply, for if it had it would surely have seriously disturbed art, and as it is, it is often declared that there must have been many beautiful works of art sacrificed in the bonfires built in the streets of Florence under Savonarola's inspiration. In the sketch of Fra Bartolommeo (M. E. James, London, 1902), the answer to this is contained in a single paragraph:

"The artists of Italy had no quarrel with the friar; some of the best of them were his devoted friends, while many entered his Order. Fra Filippo Lappacini in 1492, Fra Agostino di Paulo, Fra Ambrogio and Fra Luca della Robbia, Fra Benedetto (miniature painter), 1495, Fra Eustachio, 1496. Michael Angelo read the friar's sermons constantly; Cronaca, the great architect, 'could talk of nothing else.' Raphael painted him among the doctors of the Church. Baldini, Lorenzo di Credi and Botticelli loved him."

Among the other secondary painters of Columbus' time one of the greatest, an artist who would have stood out above all his contemporaries in almost any other period of art, is Sandro Botticelli. He is the only contemporary whom Leonardo mentions in his "Treatise on Painting." A quarter of a century ago Walter Pater, in his Renaissance essays, said of him in regard to this distinction of being mentioned by Leonardo:

"This pre-eminence may be due to chance only, but to some it will rather appear a result of deliberate judgment, for people have begun to find out the charm of Botticelli's work; and his name, little known in the last century, is quietly becoming important. In the middle of the fifteenth century he had already anticipated much of that meditative subtlety, which is sometimes supposed peculiar to the great imaginative workmen of its close. Leaving the simple religion which had occupied the followers of Giotto for a century, and the simple naturalism which had grown out of it, a thing of birds and flowers only, he sought inspiration in what to him were works of the modern world, the writings of Dante and Boccaccio, and in new readings of his own of classical stories; or if he painted religious incidents, painted them with an undercurrent of original sentiment, which touches you as the real matter of the picture through the veil of its ostensible subject."

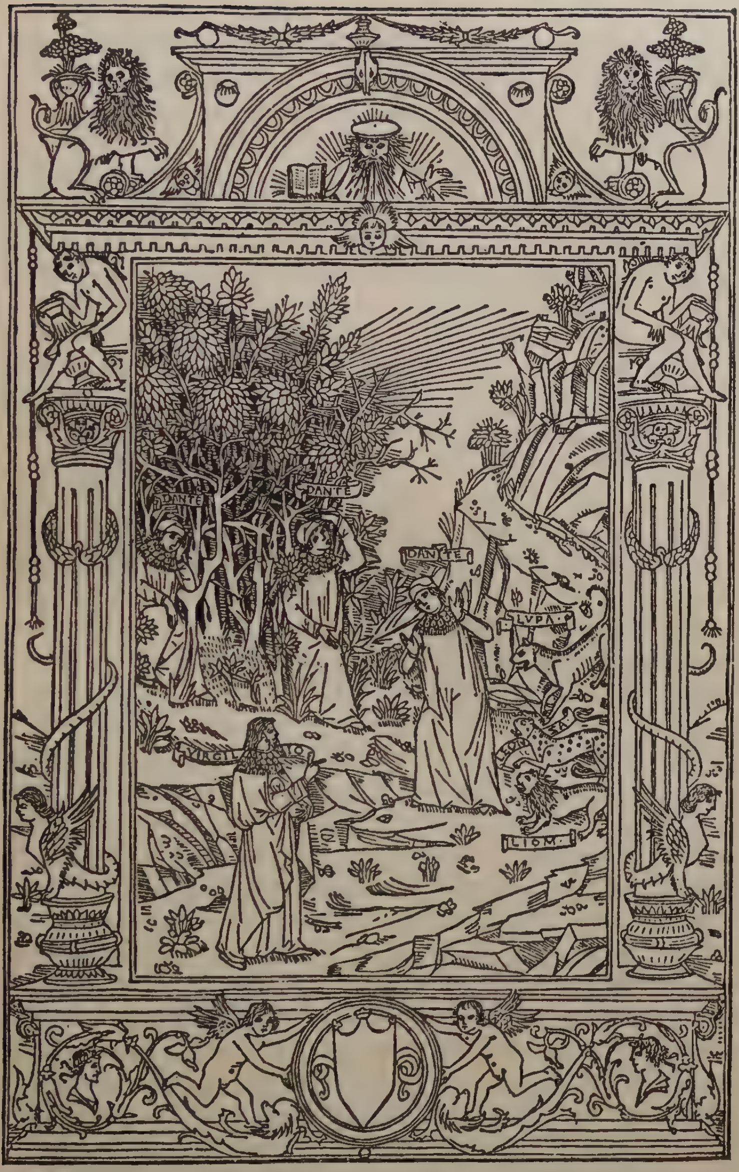
In his pictures of "Spring" and the "Birth of Venus," Botticelli has shown his power to paint great imaginative pictures, and the "Venus" particularly shows his faculty of expressing the intimate, elusive psychology of his subject. In his little sketch of Botticelli, Streeter (Catholic Truth Society, London, 1900) says:

" Perhaps the most striking thing in this dainty discerned vision of antiquity is the conscious emphasis laid on the distance from which the vision is beheld. The sorrow Botticelli had learned to restrain in his recent 'Madonnas' breaks out afresh in the wistful plaintiveness of the goddess of pleasure, separated from her true home by 'the travail of the world through twenty centuries,' by a 'yawning sepulchre wherein the old faiths of the world lay buried and whence Christ had arisen.' It would seem, not as some critics have asserted, that Botticelli strove, and strove in vain, to achieve the true embodiment of a pagan ideal, but rather that he sought in this strange mingling of pagan and mediæval sentiment to express his own profound instinct of the impossibility, to a later age, of ever reaching it."

Botticelli is famous above all for his round pictures. Somehow these *tondi,* as they are called, became fashionable in Florence about the middle of the latter half of the fifteenth century, and when he was about thirty Botticelli painted a series. One need only see the charming reproductions that are now so often used for decorative purposes to realize how beautiful they are. The " Madonna of the Magnificat," so-called because the Blessed Virgin is represented with pen in hand, as writing her song of praise, though also known as the " Coronation of the Blessed Virgin " because the angels are represented as placing the crown on her head, is the most perfect of these. The lines of the composition, which have been exquisitely arranged so as to fit into the round frame, have been very aptly compared with those of the corolla of an open rose. Botticelli was able not only to conquer the difficulties of this round form of painting, but actually to elaborate out of the difficulties involved in this form of composition new beauties, just as a poet may choose a particularly difficult metre, and actually add to the quality or at least the charm of his poetry by the exquisite form in which he puts it.

One of Botticelli's forms of artistic activity that has attracted the attention of artists and literati very much in the modern time is his execution of a series of illustrations for Dante. With his profound sympathy with the mediæval spirit it might well be anticipated that he would make as nearly adequate illustrations of Dante as may be possible. It requires a deep knowledge of Dante to appreciate these illustrations. They are not at all like modern attempts to illustrate Dante and are separated as far as Heaven from earth from Doré's illustrations. They are extremely naïve and simple, and at first are likely to strike a modern as being caricatures rather than illustrations. The grotesque element in Dante is not minimized to the slightest extent. It requires much study to appreciate Ruskin's profound expression that a noble grotesque is one of the most sublime achievements of art. The illustrations have to be studied in connection with the text and with a thorough spirit of devotion to Dante before proper appreciation comes. Great authorities in art and in the older literature, however, have united in declaring these the most wonderfully illuminating illustrations of Dante that were ever made. It is an index of the genius of Botticelli that he should have achieved so marvellously in a mode of art unfamiliar to him personally and then quite new in the world. His illustrations were made as copies for the illustration of a printed book.

Until Botticelli has been studied faithfully and seriously, most people are likely to think of him as a painter of what he saw with a certain poetic charm and a naïveté which makes him by contrast particularly interesting to the modern world. Few realize how much appreciative students of Botticelli, who are at the same time art critics, have learned to think of his high seriousness, his lofty purpose and his marvellous execution in his paintings. It is above all for his psychology that he has come to be admired in the modern time, and as our own interest in psychology has deepened, the appreciation for Botticelli has grown. He was gifted with a profound psychological insight into character, which he knew how to express with almost incredible simplicity and directness. Talking of his St. Augustine, St. Jerome, St. Eligius and St. John, a well-known German critic, Prof. Steinman, recently said: "It would seem that in these four strongly contrasting figures



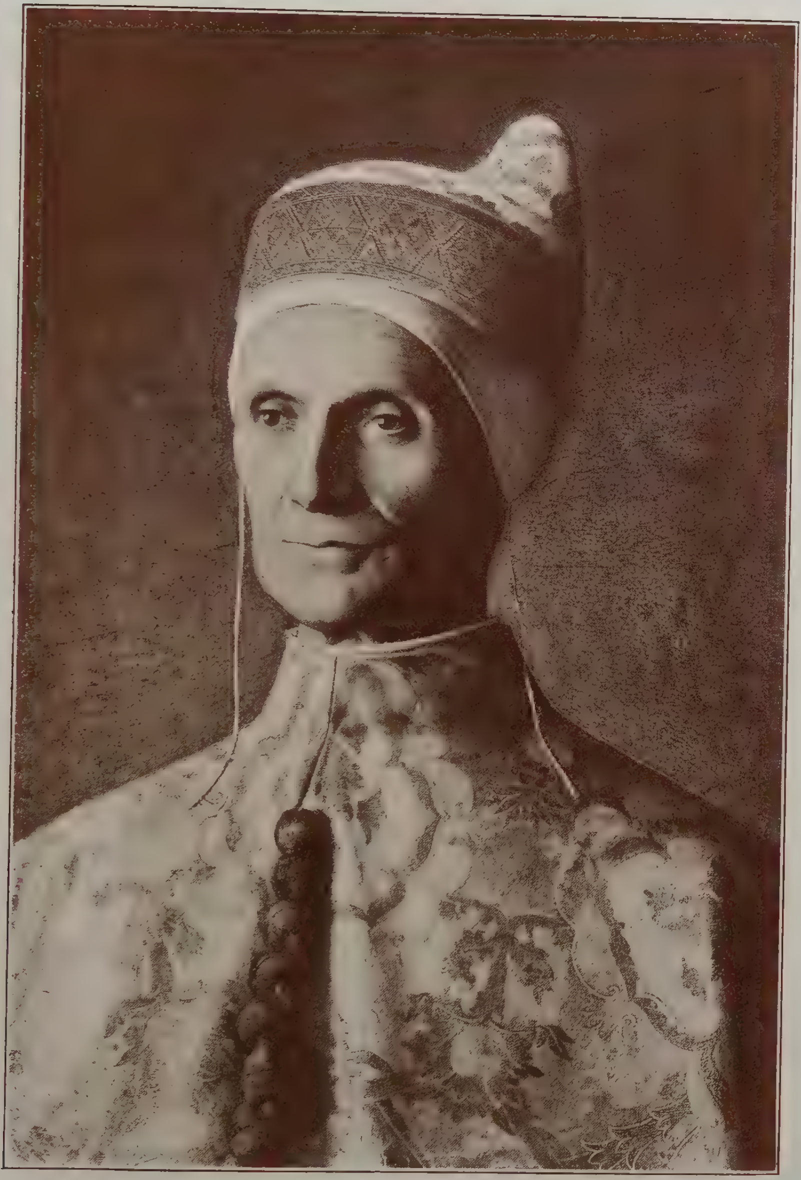
N.i 15 e 16. Dante. *Venesia, Bernardino Benali e Mathia (Capcasa), 8 Marso 1491.*
(La prima figura in grandezza normale).

BOTTICELLI, ILLUSTRATION FOR DANTE

Botticelli aimed at portraying the four human temperaments in their separate and distinctive modes of response to the same spiritual appeal: the fiery enthusiasm of the impulsive St. John, looking upwards, rapt in wonder; the studious concentration with which St. Augustine, who here represents the phlegmatic temperament, unmoved, continues his writing; the nerve-strained longing of St. Jerome, worn and wasted with many fastings and watchings; and the benignity of the sanguine St. Eligius, who, gazing before him, raises his hand in blessing. With consummate skill, Botticelli has distinguished between the reality of these living figures and the ideal quality of the celestial vision. And a special artistic interest is given to this picture, making it a typical instance of the rare versatility of the painter's genius, by the fact that in the vigorous, massive, realistic portraiture of the saints, in the fantastic, poetical delicacy of the angelic choirs, in the stiff, severe traditionalism of the central figures of the mystery, it shows three separate modes of imaginative conception, three separate methods in the manipulation of line and colour, so distinct and individualized that it would seem almost that they must be the work of three separate artists."

A very great painter, who is not often appreciated as he should be outside of Italy, though in recent years he is much better known, is Giovanni Bellini, the distinguished Venetian painter. His portrait of the "Doge Loredano" is now recognized as one of the world's great portraits, and copies of it are to be seen everywhere. His masterpieces, however, are his altar pictures, which are noted for their beauty and devotional quality. His Madonnas particularly are famous. His well-known painting at Berlin of the "Angels Mourning over Christ" is probably one of the most humanly touching of mystical pictures. The "Presentation of the Infant Christ" in the Temple, in which Mary is shown presenting the child to the High Priest over a table, while the striking expression of worship on the faces of old Simeon and Joseph completes the meaning of the picture in wondrous fashion, is another typical example of Bellini's power to express the loftiest devotional sentiments.

Among those in second rank in this great period of art, one



BELLINI, DOGE LOREDANO

of the greatest was surely Titian. In any other period he would quite easily have been the greatest painter of his time. His painting was done in Venice, and his early training was in glass work and mosaic work, to which apparently must be attributed his marvellous development of color in painting. At the age of about fifteen he entered the studio of Giovanni Bellini, at that time the greatest of Venetian painters and one of the important contributors to the art of this period. In this studio a group of young men, including Giorgione, with whom Titian came to be on terms of intimate friendship, Giovanni Palma, Lorenzo Lotto and Sebastiano Luciani, all destined to fame, were brought together. Especially Titian and Giorgione broke away from the older traditions of painting and became founders in modern art. All of his long productive life of nearly 100 years, except for very short visits elsewhere, Titian lived in Venice and did his marvellous painting there. There are masterpieces by him that are acknowledged by artists and critics to be among the greatest paintings we have. No one has been more faithfully studied by art students in all the generations since his time. Some of his Madonnas are among the most beautiful in the world and bear comparison even with all but the very finest of Raphael's. His "Entombment of Christ" in the Louvre is a surpassing representation of this scene which so often appealed to artists. The "Assumption" at the Academy in Venice is probably one of the most visited of pictures in Italy and shows all the best qualities, though some also of the defects, of the great Venetian.

Such pictures as the "Presentation of the Blessed Virgin," in the Vatican at Rome, show how Titian faithfully developed his best powers until he arrived at the very climax of artistic expression. No more thoroughly satisfying representations of religious themes were probably ever made. While he could make wonderful pictures on a large scale, and his compositions have always been the subject of loving study, some of his smaller pictures are almost more beautiful than any he has made, and his series of small Madonnas are only equalled and very few of them surpassed even by Raphael's treatment of the same theme.

As a portrait painter, however, Titian almost excelled his work as a religious painter. His series of portraits of the Emperor Charles V are among the world's greatest portraits. His portrayals of Philip II are thought by some even to surpass those of his father. Titian's portraits of himself and his daughter are wonderful "counterfeit presentments" of the real individuals. Indeed, the portraits of his contemporaries left us by Titian have an eternal interest, and besides being great works of art they are marvellously illuminating of the human personalities depicted. They represent not merely a reproduction of the features of the individual, but preserve for posterity the character and the very soul. Leonardo da Vinci and Raphael have surpassed him when they set themselves the same task. Van Dyke is his equal in some respects, but much less satisfying. Rembrandt and Velasquez are his peers, but there are those who think that he combines the best qualities of both these great successors in the same field to a noteworthy degree.

Besides his religious pictures and portraits, however, Titian succeeded in painting some of the greatest representations of ancient mythological lore that have ever been done. His much-admired picture of the "Bacchanals" in Madrid and the still more famous "Bacchus and Ariadne," so often now seen in copies, show how well he could enter into the spirit of the old Olympian mythology. It was typical of the Renaissance time in which he lived that he should thus be inspired by Greek culture and religion. If we did not have from his hands so many beautiful Christian devotional pictures, which never could have been painted except by a man who was himself a believer in the religious scenes and mysteries that he portrays, it would have been almost impossible to believe, after a study of these pagan pictures, that he could have retained a devout Christian piety and faith with such a sympathetic appreciation and an intimate understanding of the psychology of the old pagan myths. It was this combination, however, that was perfectly possible to the great minds of the Renaissance period. The greater they were like Titian, Michelangelo and Raphael, the deeper was their faith, though the higher their power to portray phases of religious feeling that might be considered so foreign to their religious experience as to be quite out of the range of their sympathetic expression. Smaller men, influenced by Greek mythology, became merely pagan, but the greater men retained their faith in its completeness. The smaller men are so much more numerous that we have the tradition of the Renaissance making men pagan, but this is not true with regard to the geniuses of the time.

Titian, as Delacroix said in the article in his "*Dictionnaire des Beaux Arts,*" is one of those who came closest to the spirit of antiquity. The great modern artist and art connoisseur did not hesitate to declare that nowhere, unless perhaps in such great monuments of antiquity as the sculptures of the Pantheon, can antiquity be so well understood as in the pictures of Titian. Yet this is the painter whom the bishops and ecclesiastics, the monks and friars and the people of his time, desirous of expressing what was deepest in their sense of devotion and piety, sought after most eagerly, because of his wonderful ability to express all the charm of religious personages and all the power of religious feelings. He has all the many-sidedness of the Renaissance, yet without any loss of the mediæval power to inspire profound Christian feeling.

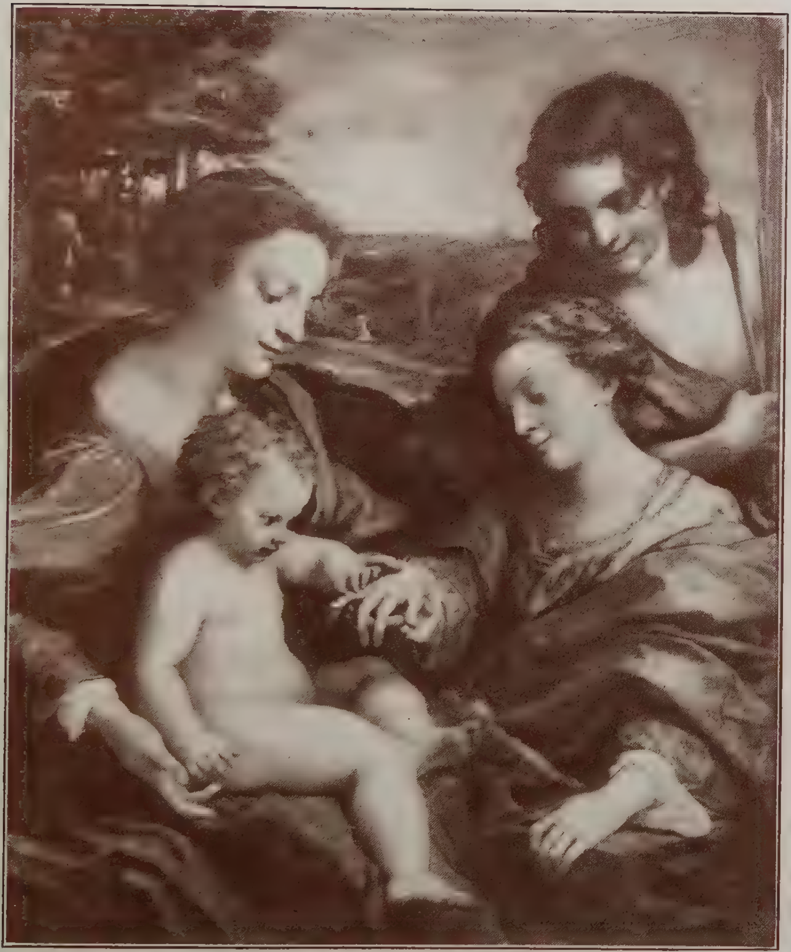
A very great school of art of the Renaissance was that which took its rise in Southern Tuscany and the Romagna, of whom the three best-known representatives are Piero dei Franceschi, Luca Signorelli and Melozzo da Forli. Piero's influence on Perugino has already been spoken of. Berenson declares him "hardly inferior to Giotto and Masaccio in feeling for tactile values; in communicating values of force he is the rival of Donatello; he was perhaps the first to use effects of light for their direct tonic or subduing and soothing qualities; and, finally judged as an illustrator, it may be questioned whether another painter has ever presented a world more complete and convincing, has ever had an ideal more majestic, or ever endowed things with more heroic significance."

Piero's two pupils, Melozzo and Signorelli, each of them starting, as Berenson says, with the heritage Piero left him, yet following the promptings of his own temperament and the guidance of his own genius, touched excellence in his own splendid way. Melozzo was the grander temperament, Signorelli the subtler and deeper mind. Visitors to Loretto, who see the music-making angels in a cupola there, are likely to be surprised into an appreciation of the power of the painter to express something of the witchery of music. Berenson says of them: * "Almost they are French Gothic in their witchery, and they listen to their own playing as if to charm out the most secret spirit of their instruments. And you can see what a sense Signorelli had for refined beauty, if, when seated with Guido's 'Aurora,' you will rest your eyes on a Madonna by him in the same pavilion of the Rospigliosi Palace."

One of the very great artists of the Renaissance, who has come into his own of appreciation in recent years again, is Antonio Allegri, generally known as Correggio, from the small town near Mantua in which he was born. He is one of the most surprising figures in the history of art. So far as we know, he had no teachers and no pupils. He seems never to have visited any of the cities in which in his time (1494-1524) so many great pictures might have been seen, nor did he seek to make the acquaintance of any of his great contemporaries. All that we know of him was that he had "an uncle who painted, but was no artist." He influenced the artists of the after-time in Italy almost more than any of his contemporaries. By some he is placed among the decadent or "sweet" school of Italian painting, and undoubtedly such painters as Guido Reni and Carlo Dolci, who were for many centuries more popular than the greater masters, were deeply influenced by him. While so negligent of others' achievements in life he was destined to form a school that attracted more attention from subsequent generations than almost any of his contemporaries. His pictures represent a climax of Italian religious art, and his painting of angels and celestial beings, together with that of Fra Angelico two generations before, serves to show how wonderfully the Italian painters of this time were able to visualize spiritual conceptions.

Grimm, in his "Life of Michelangelo," says of Correggio: "As Parma, where he (Correggio) painted, lies between Milan, Florence and Venice, so does Correggio's painting represent a middle term between the schools of these cities. Greater

* *Op. cit.*, p. 81.



CORREGGIO, MARRIAGE OF ST. CATHERINE (LOUVRE)

than all who came after Michelangelo, Leonardo and Raphael there are many qualities of his art in which Correggio excels even these. Unlike the Venetians, he did not neglect drawing; he embraced the whole of his art and made a distinct advance."

Grimm goes as far as to say, "If we could think of streams flowing together out of the genius of Raphael, Leonardo, Titian and Michelangelo to form a new spirit, that spirit would be Correggio's. He has the dreamy smiling sweetness of Leonardo, and to add an external detail, his fate as to our absolute ignorance of his inner and outer life; he has the joyous, radiant, uncreated quality of Raphael with his brief life and its interruption in the very bloom of it; he has the boldness of Michelangelo, his liking for unprecedented attitudes and his power to reproduce them in marvellous foreshortening; he has Titian's soft coloring and the gift to picture the palpitating naked flesh as if the pulse was beating in it."

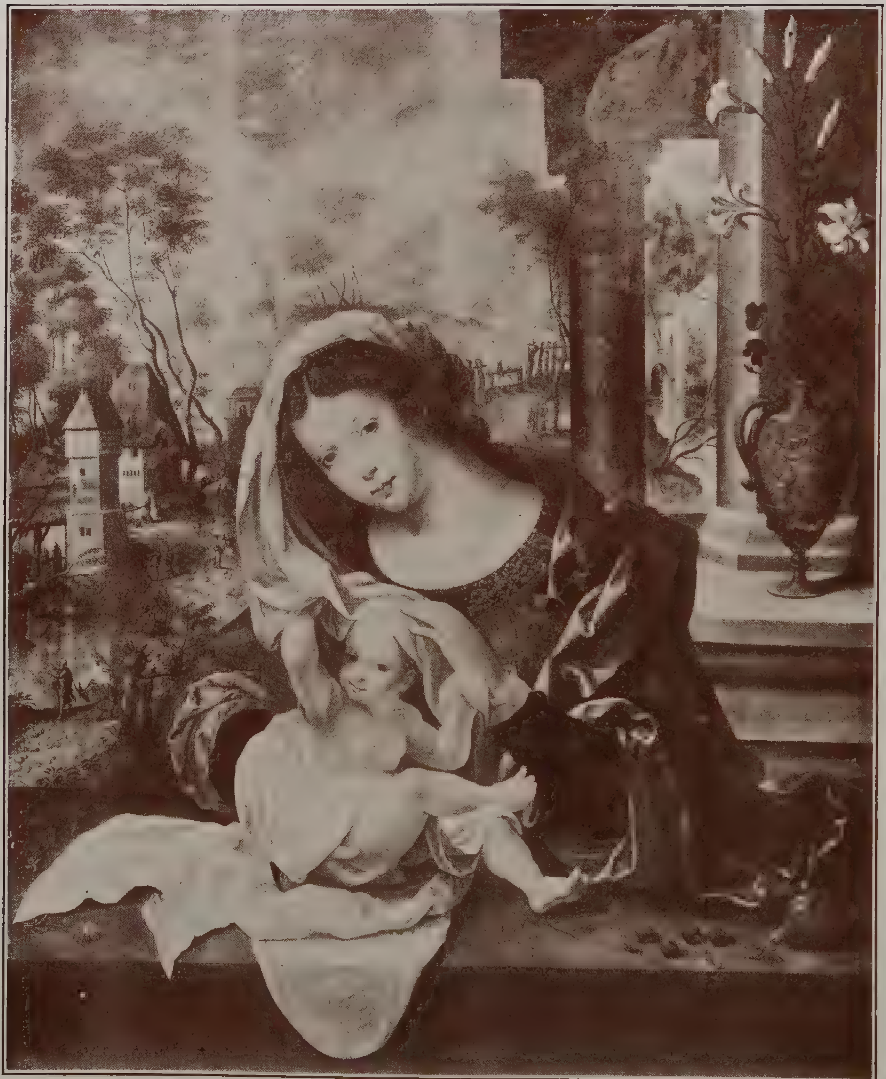
It is one of the world's greatest losses in art that he was cut off in his prime at the early age of thirty, yet what we have from him shows the supreme artist, and though we might have had further precious art treasures, we could scarcely have had a completer revelation of his genius.

Leigh Hunt, in his article on him in the "Catholic Encyclopædia," emphasizes the far-reaching influence which Correggio's work had over artists after his time and how deeply the principles of his art prevailed in painting and sculpture in the seventeenth and eighteenth centuries over all Italy and France.

"Correggio is the most skilful artist since the ancient Greeks in the art of foreshortening; and, indeed, he was master of every technical device in painting, being the first to introduce the rules of aërial perspective. Radiant light floods his pictures and is so delicately graded that it passes subtly into shade with that play of reflections among the shadows which gives transparency in every modulation. This is *chiaroscuro*. Even in Allegri's earliest works it was prominent, and later he became the acknowledged master of it. His refined feeling made Correggio paint the nude as though from a vision of ideal beauty; the sensuous in life he made pure and beautiful; earthly pleasures he spiritualized, and gave expression of mental beauty, the very culmination of true art. His angel pictures are a cry of *Sursum Corda.* The age in which he lived and worked was partly responsible for this; but his modesty, his retiring disposition, his fondness for solitude, his ideal home-life, his piety and the fellowship of the Benedictine monks contributed far more to it."

A very great painter of Columbus' Century, though he is usually thought of as of a later period, was Jacopo Robusti, whom we know as Tintoretto. According to Ridolfi, himself born almost on the date of Tintoretto's death, the artist was born in 1512, though later dates up to 1520 have been assumed for him. Like many of the other great workers of the Renaissance, he too lived to be at least seventy-five and probably well beyond eighty. The same store of energy that enabled him to accomplish his work gave him length of days. He was the son of a dyer, and, as a boy, was fond of drawing, finding the colors used by his father valuable for practice in painting. While he lived at a time when many of the great painters of the Renaissance were at work, he was not deeply influenced by them, but fortunately for himself developed his own genius. He is famous for his drawing, his power over which he owed to dissection, drawing from life and from models draped and lighted in various ways, some of them suspended from the ceiling so as to get the correct prospective of flying figures. He invented an ingenious device, a rectangular framework with strings across it which, held before the eye, taught how to measure the proportions accurately. While Venetian painters generally are famous for their coloring, Tintoretto is the master of them all in drawing and one of the world's greatest artists in Italy.

Like every other great worker of the Renaissance, almost without exception, he had a passion for work and has left us an enormous amount of finished painting. Some of his paintings, as, for instance, the "Bacchus and Ariadne," are looked upon as the greatest of their kind. Some of his great paintings in the palace of the doges at Venice have been a favorite study of artists ever since his time. Ruskin considered him one of the greatest painters who ever lived and has made his name and work familiar to English-speaking peoples. Probably no one has ever dared to attempt the solution of so many



GOSSAERT, VIRGIN AND CHILD JESUS (ITALIAN INFLUENCE OVER FLEMISH) problems in painting as Tintoretto, and no one has solved them better. He deeply influenced his own generation and has influenced every generation since that has had true critical spirit and appreciation for art. It has been well said of him, and without exaggeration, that he mastered every detail of his art. Ridolfi tells us his two favorite subjects of study were the works of Titian and the reliefs of Michelangelo. He wrote on the wall of his studio these words, *Il disegno di Michelangelo é il colorito di Titiano* (the drawing and composition of Michelangelo and the coloring of Titian). These were his ambitions. He as nearly accomplished this transcendent purpose as perhaps it is possible to be done.

An eminent painter of the Venetian school at this time, who is usually thought of as belonging to a later period, is Paolo Cagliari, better known as Veronese. He was twenty-two years of age, however, before Columbus' Century closed, and as he began his work very early in life he had received some important commissions before he was twenty-five years of age. He owes all his training to the great period at least. His greatest picture, the "Marriage at Cana," was painted practically within the decade after the close of our period. He was very fond of huge compositions, and Tintoretto alone outdid him in the conception of large pictures and the filling of large canvases. Like most of the painters of the Renaissance, he was a man of tireless energy, as well as sharing the facility that so many of them possessed; his very large pictures did not serve to limit the number of his paintings to the extent that might otherwise be expected. He was a master of decoration and of the use of the sumptuous color that the Venetians had invented because of their familiarity with pigments and the making of glass, and no great decorative painter has equalled him in the effect produced by this wealth of color. Already the decadence is beginning and his great paintings lack feeling, and above all exhibit no trace of religious feeling, though many of them are on religious subjects, but they are splendid, unexcelled, cold triumphs of composition.

These great painters of the Renaissance, touched by the humanistic spirit abroad in the world of their time and with the old Greek ideas of the place of man as the very centre of the universe, created a new way of looking at men in their relation to the world around them. They Hellenized their vision of men and stamped it upon the culture and civilization of their time. Berenson has suggested in his "The Central Italian Painters of the Renaissance" that they thus influenced not only men's way of looking at men, but actually to some degree transformed men themselves by the mirror they held before them. He said: *

"The way of visualizing, affected by the artists, the humanists and the ruling classes, could not help becoming universal. Who had the power to break through this new standard of vision and, out of the chaos of things, to select shapes more definitely expressive of reality than those fixed by men of genius? No one had such power. People had perforce to see things in that way and in no other, to see only the shapes depicted, to love only the ideals presented. Nor was this all. Owing to this subtle and most irresistible of all forces, the unconscious habits of imitation, people soon ended either by actually resembling the new ideals or, at all events, earnestly endeavoring to be like them. The result has been that, after five centuries of constant imitation of a type first presented by Donatello and Masaccio, we have, as a race, come to be more like that type than we ever were before. For there is no more curious truth than the trite statement that nature imitates art. Art teaches us not only what to see, but what to be."

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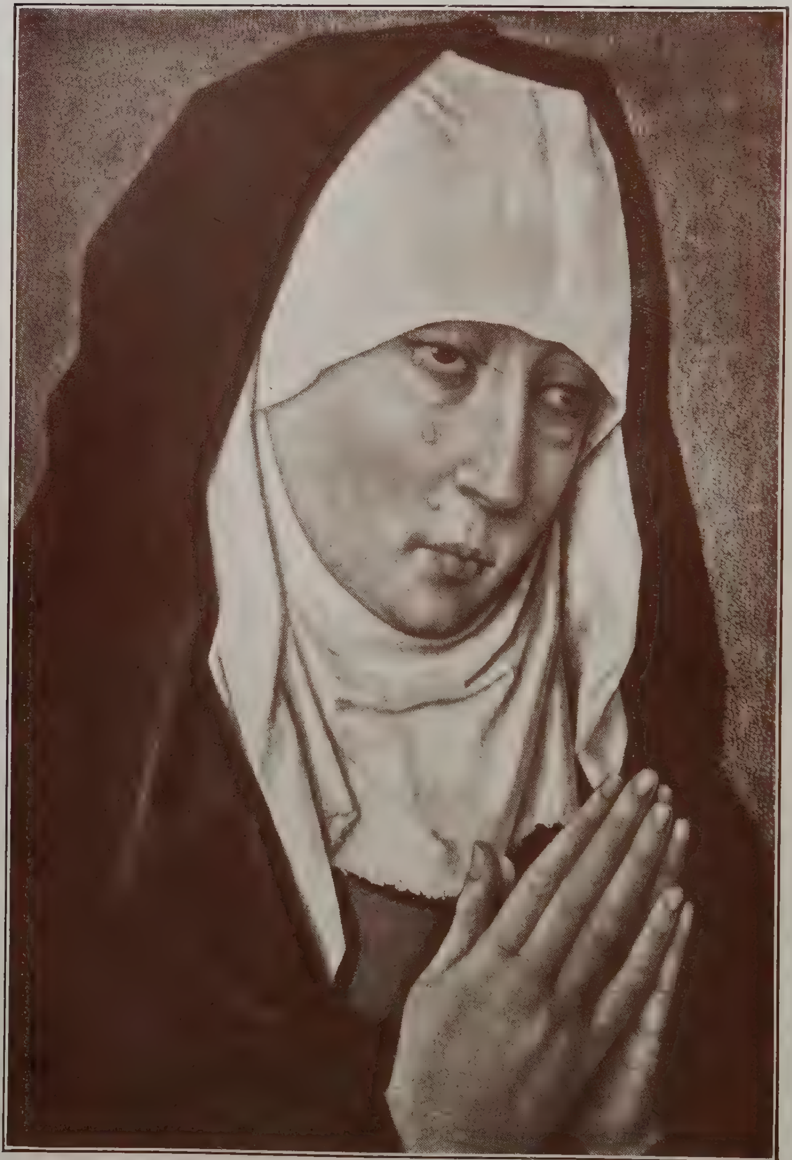
* *Op. cit.*, p. 67.



VAN DER WEYDEN, MATER DOLOROSA

CHAPTER V

PAINTING OUTSIDE OF ITALY

While it is the custom to think of our period, Columbus' Century, as the time of the Renaissance, owing its inspiration to the rebirth of Greek ideas into the modern world, it must not be forgotten that quite apart from this there was a "great wind of the spirit" of art blowing abroad at this epoch. The Renaissance is thought of as Italian, but the Teutonic countries exhibit in Columbus' Century a great artistic development at the beginning quite uninfluenced by the New Learning that came from the Greek rebirth. Painting, sculpture, architecture and the arts and crafts, all reached a climax of expression in the Teutonic countries, especially in the latter half of the fifteenth century, the evidence for which is to be seen in the monuments preserved for us particularly in the Low Countries and in Southern Germany.

Flemish art above all others reached a high level of perfection at this time that has scarcely ever or anywhere been surpassed. The work of the brothers Van Eyck, accomplished just before the opening of Columbus' Century, paved the way for a great new development of art and made their invention of painting in oil the favorite medium of pictorial expression. After such a work as "The Adoration of the Lamb," at Ghent, no one could doubt either of their genius as artists or the future of the new mode in painting. Their pupil, Roger Van der Weyden, did not excel his masters, but carried on worthily the tradition which they had established, and passed on the torch which they had lighted to successors whose fame was to be undying. Memling is indeed a great master in painting, almost never excelled, seldom equalled and representing a phase of art development quite independent of the humanistic side of the Renaissance.

The wonderful decorations of the casket of St. Ursula in the Hospital of St. John at Bruges, done just about the time of the discovery of America, are not unworthy to be placed beside the greatest art of Europe from any period. The almost more beautiful "Adoration of the Magi" in the same place shows a minute finish in detail, a marvellous power of composition, a charm of expression and a wonderful application of colors which have not faded during all these four and a half centuries, which deservedly place it among the world's supreme artistic triumphs. What Giotto is at Padua in the Arena, and Fra Angelico in San Marco at Florence, Memling is in the Hospital of St. John at Bruges. The pictures must be seen in all the glory of their unfading colors to be properly appreciated or to enable those who are less familiar with the great work of the Netherlands painters to understand the encomiums of critics; but even uncolored reproductions give some idea of the charm of the originals.

Strange to say, because of the neglect of the biographical details of their painters' lives by the Teutonic nations, even Memling's name has not been quite certain until comparatively recent years. Bruges was one of the great merchant towns of this time, wealthy, populous, busy, enterprising, ambitious, the home of merchant princes who were as generous in their patronage of art as the ecclesiastics or nobility of Italy, or as our own millionaires, though they believed in the creation of new works of art especially adapted to their surroundings rather than the collection of those that had an established reputation. During the first half of the fifteenth century Brabant had produced the group of famous artists whom we have mentioned, most of whom worked at some time or other in Bruges. As Weale, himself an associate of the Royal Academy of Belgium, says in his "Hans Memlinc"*: "Of none of all the many celebrated men who made this town their home has Bruges more reason to be proud than of Hans Memlinc." While his works remained, however, the personal memory of him was lost, and hence it is only in our time that it has been quite sure that the initial letter of his name should be "M" and not "H," though the other form is often used by writers

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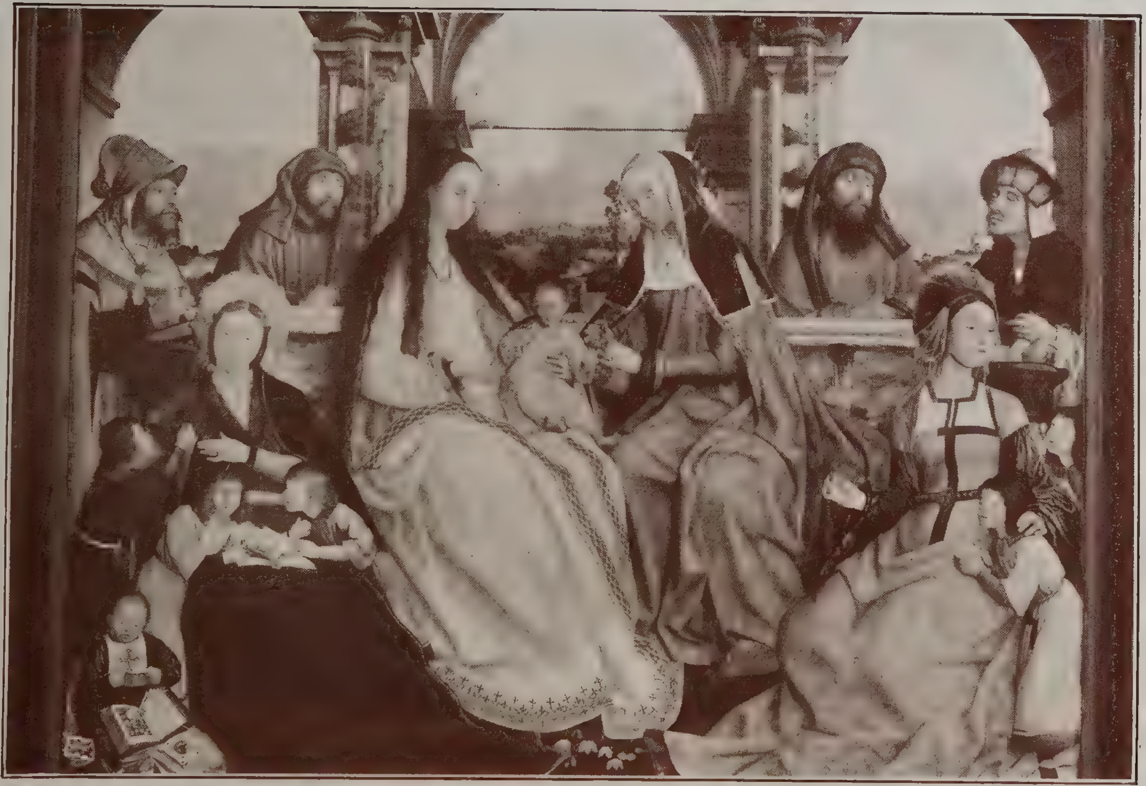
* London: George Bell & Sons, 1907.



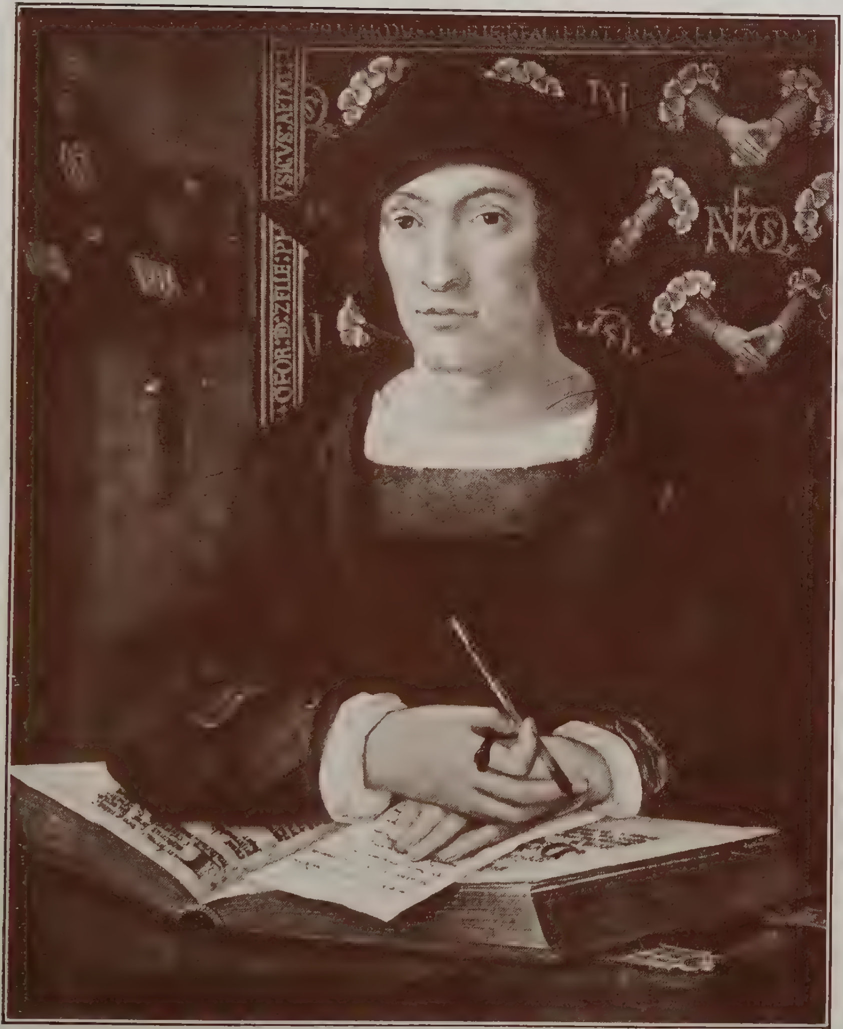
QUENTIN MATSYS, LEGEND OF ST. ANN (CENTRE) about art, and that the final letter should probably be "c" and not "g," though in English the latter terminal has been most frequent.

It was only in 1889 that Father Dussart, S.J., discovered in the Public Library of St. Omer in a manuscript by the historian, James De Meyere, an extract from a diary, in which the death of John Memmelinc, the painter, is placed on the 11th of August, 1494. He was probably born about 1435, or a little before, so that his accomplishment as a painter was all in the first half of Columbus' Century. Memling is the greatest of all these early painters of the Netherlands in his portraits, and yet there are many religious pictures which are full of the devotion of the best of the Italians and wonderful in their composition, in their solution of the technical problems of painting and their marvellous power of expression which show him to be one of the great painters of the world. His great picture, which has been called "Christ the Light of the World," is a triumph in every mode of the painter's expression. His shrine of St. Ursula, an oblong tabernacle of carved oak with gabled ends, for which Memling did a series of miniatures, is one of the most beautiful accomplishments of this kind in the world. In very contracted panels, Memling has placed hundreds of beautiful faces and details of architecture, shipping and water scenes that must be seen to be appreciated. "It has been said that Van Eyck, even when painting religious subjects, only awakes earthly ideas, whilst Memling, even when painting earthly scenes, kindles thoughts of heavenly things. It is easy to see by his paintings that he was indeed a man humble and pure of heart, who, when the arts were beginning to abdicate their position as handmaids of the Church in order to minister to the pleasures of men, preserved his love for Christian tradition, and in earnest simplicity painted what he believed and venerated as he conceived and saw it in his meditations. There is no affectation, no seeking after novelties, no mixture of pagan ideas in his works."

Memling's contemporary, Dirk Bouts, deserves scarcely less praise, and Quentin Matsys is another of the genius painters of the time. The story of his rise from blacksmith to painter is only a good illustration, whether legendary or not, of the closeness of the mechanical arts, those of the goldsmith and the silversmith particularly, but of all the smiths, to the liberal arts of painting and sculpture. The divorce of these higher and lower arts from each other always leads to decadence, not alone in the mechanical, but also in the liberal arts. The goldsmith or silversmith in the Low Countries, in Italy, in Nuremberg, easily became a sculptor in the highest sense of the term, and not infrequently turned his attention successfully to other arts. It was an ideal condition, showing how deeply culture had penetrated, and whenever something of it at least does not exist the liberal arts are sure to be artificial and borrowed, not native and genuine.

Memling's successors in the Flemish tradition of painting maintained their master's distinction, and even when lacking in that genius which alone enables men to do great work did painting that is far above the mediocre, and that served to spread the spirit of culture among the people. Lucas van Leyden, in a short life of less than forty years, did some beautiful things that shall always keep his memory alive. Gerard David falls only short of the work of such great contemporaries as Memling himself. David's pupil, Moestart, nobly continues the tradition of his master. Michiel Coxcie and others do good work before the end of Columbus' Century, which, in a country less dowered with great artists than Flanders, would have secured them places of highest distinction in the history of national art.

The generation of Flemish painters after Memling who studied in Italy represent among them some great artists worthy to be mentioned even beside their Italian masters, though these are confessedly the great Renaissance artists. Justus of Ghent is the first of these, an actual contemporary of Memling and a man who not only learned from but also in turn deeply influenced the Italians with whom he was brought in contact. Jan van Mabuse-Gossaert, Bernard van Orley, Blondeel and Gerard David were touched by the spirit of the Italian Renaissance and its great painters, yet preserved the native fire of their genius and displayed national characteristics which have deservedly given them a place quite apart from the Italian schools. Some of their paintings are among those



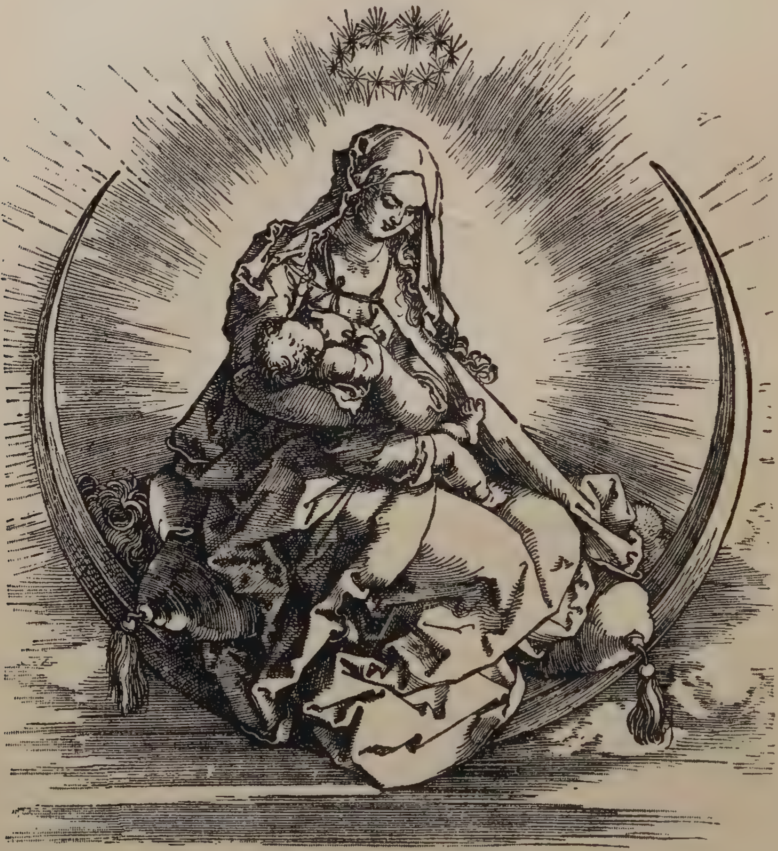
VAN ORLEY, DR. ZELLE

the world knows best and values most highly, and they have gained in prestige in later years as the knowledge and appreciation of Teutonic art has spread.

Great as was the distinction and achievement of the Low Countries, at this time it was not so far superior to Southern Germany as to eclipse its brilliancy. What Bruges was to the Low Countries, and especially Flanders as an art capital at the beginning of Columbus' Century, Nuremberg was to Southern Germany. The city well deserves the name of Northern Florence, for all the arts flourished luxuriantly and the monuments attest, even better than any traditions, how much was accomplished here for art. Her greatest artist in this, very like so many of his Italian contemporaries, was not limited in his powers of expression to any one narrow mode, for Albert Dürer was painter, designer, engraver, but also like Leonardo a mathematician, and like Michelangelo a writer. Dürer's place as a painter is too well known to need special description here. He is now acknowledged to be one of the world's greatest artists, worthy to be mentioned in the same breath even with his supremely great contemporaries, Raphael, Leonardo, Titian, Botticelli and Correggio. In recent years he has come to be more generally known. His pious pictures have a certain Teutonic literalness added to their mystical quality that gives them distinction.

He is one of the great group of cultured intellectual people who made Nuremberg so famous at this time. While his art has many essential German characteristics, it is much more than national, though it shows very well the high standard of excellence that the German painters of this time had attained. His visits to Italy and the Netherlands broadened his views, developed his artistic sense, refined his taste and did much for him, yet the essential German character of his painting and his absolute individuality as an artist remained. Some of his Madonnas are quite as charming in their way, though very different from the Italian, as those of the great Renaissance painters in the peninsula. His " Adoration of the Magi " will bear comparison with the masterpieces even of Italy and the Netherlands, and his Madonnas, though of German type, have a sweetness all their own. In his second period some of his painting at Venice shows how deeply he was influenced by the Venetian colorists and yet was never merely an imitator.

Dürer did fine work of real artistic quality, not only in painting, but also in wood engraving, and afterwards in engraving on copper. Prints from his woodcuts or copperplates still command high prices, and indeed it is probable that only those of Rembrandt are valued more highly. He brought these two modes of art to great perfection. He was a fine craftsman, as well as an artist, and both etching and wood



DÜRER, TITLE PAGE OF LIFE OF BLESSED VIRGIN (WOODCUT, 1511) engraving owe much to his inventive ability and handicraftsmanship.

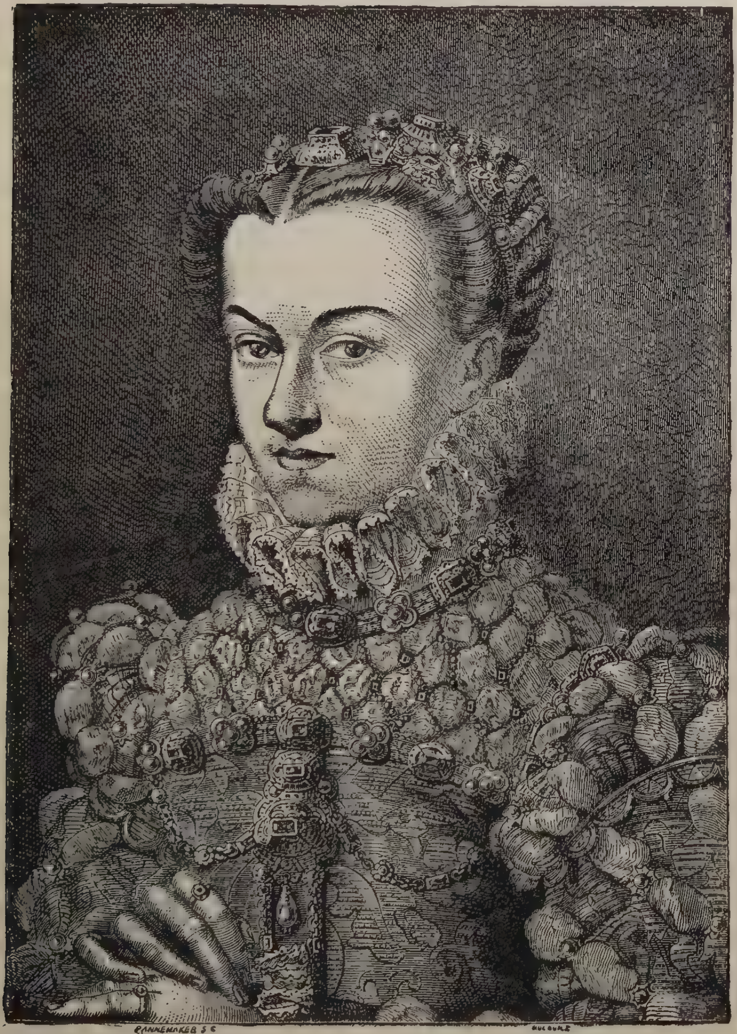
As might be expected of this intimate friend of Wilibald Pirkheimer, he was a scholar as well as an artist, and we have from him three books, one on the proportions of the human figure, which shows how carefully he studied the essentials of his art; one on geometry and one on the art of fortification. Like Leonardo he felt his ability as an engineer, and like Raphael and Michelangelo was widely interested not only in every mode of art, but all the intellectual interests of his time. No more than the Italians he was not a narrow specialist in any sense of the word, and nothing shows so clearly as his career and achievements how much the spirit of genius was abroad at this time in Europe everywhere, lifting men up to heights of accomplishment that had scarcely been possible before.

Besides Dürer, the great painters of South Germany were the Holbeins, father and son. Hans Holbein the elder first came into prominence at Augsburg as a partner to his brother Sigmund, a painter, none of whose works have come down to us. His early works are nearly all on the Passion and show the influence of his studies of the Passion Plays, so frequently given all over South Germany at this time. Early in the sixteenth century he came under Italian influence and painted some pictures that, while naïve and primitive, exhibit evidence of high artistic ability. His fame was eclipsed entirely by his son, Hans Holbein, known as the younger, though there is no doubt at all of the influence exerted by Holbein the father on the art of his period, and his sketchbooks are precious material for the biography and customs of his contemporaries.

His son left Augsburg about 1515 to become an illustrator of books at Basel. The first patron of the younger Holbein is said to have been Erasmus, for whom, shortly after his arrival, he illustrated an edition of the "*Encomium Moriæ*" by pen-and-ink sketches, which are now in the Museum at Basel. After some five years of work as an illustrator, Hans began to attract attention by his portrait drawings. Some of these, as J. A. Crowe in his article on Holbein in the ninth edition of the "Encyclopædia Britannica" says, are "finished with German delicacy and with a power and subtlety of hand seldom rivalled in any school." That he could paint with almost equal distinction his portrait of Boniface Amerbach, painted in 1519, furnishes ample evidence, for it is "acknowledged to be one of the most complete examples of smooth and transparent handling that Holbein ever executed" (Crowe).

Art was gradually being pushed out in the German countries, however, and above all there was no opportunity for religious painting, which used to form the chief source of income and of inspiration, as well as the principal resource of painters before this, as it continued to be in the Latin countries. Besides, the religious revolution had come to occupy men's minds with disputes about religious subjects, and interest in art further declined. How well Holbein could have painted religious pictures is very well illustrated by the famous altarpiece of the Burgomaster Meyer, with his wives and children, in prayer before the Blessed Virgin. Few Madonnas are more impressive than this, but now the beautiful Mother of God was no longer an object of reverence. Holbein could get no further commissions of this kind, and was pitifully reduced, it is said, even to the painting of escutcheons for a living. Erasmus, whose portrait he had so often made in many different positions, compassionated his poverty and lack of occupation and sent him with a note of introduction to Sir Thomas More. More appreciated him at once, had him paint his own portrait and those of his family and engaged the interest of the nobility in him.

Holbein executed portraits of many of the prominent nobility of England, and after two happy years returned to Basel, taking to Erasmus the sketch of More's family, which is still to be seen in the gallery of that city, being indeed one of the precious treasures of it. With the money made in London, Holbein purchased a house and made the charming portraits of his wife and children for it, but the next year witnessed the fury of the Iconoclasts, who, in their so-called reforming zeal, destroyed in one day almost all the religious pictures at Basel. It is not surprising to find him two years later back in England, where the merchants of the Steel Yard gave him a series of commissions to paint portraits and he was employed also by the Court to provide the famous series of portraits of prospective Queens for Henry VIII. Some of these make it very clear that he could do portraits absolutely without flattery.

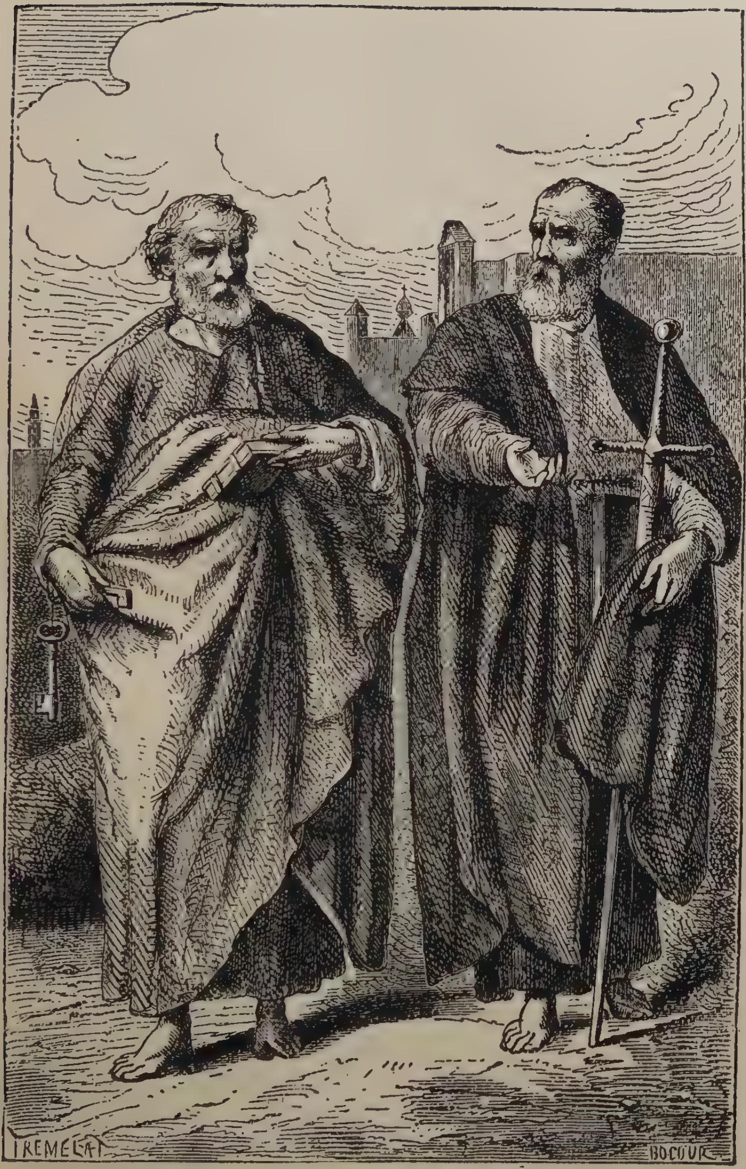


CLOUET, FRANÇOIS, ELIZABETH OF AUSTRIA, WIFE OF CHARLES IX (LOUVRE)

The series of drawings by him at Windsor form one of the most precious treasures of the English Crown. He was busy painting a picture of Henry VIII, "Confirming the Privileges of the Barber Surgeons," still to be seen in their building in London, when he sickened of the plague and died in 1543. Crowe says, "Had he lived his last years in Germany he would not have changed the current which decided the fate of painting in that country; he would but have shared the fate of Dürer and others, who merely prolonged the agony of art amidst the troubles of the Reformation."

Everywhere a great spirit entered into art and produced a series of artists with an originality and a power of expression that has given them a place in the history of art. The first important development of the modern period in France came among the illuminators of books and is well illustrated by the work of Jean Fouquet of Tours, the Court Painter of Louis XI. I have mentioned some of the books illuminated by him in the chapter on Books and Prints, and a copy of one of his illuminations from the famous Livy manuscript will be found there. He did a series of larger works which entitles him to the name of painter, and his portraits are worthy of the time. Bourdischon and Perreal, the first a painter of historical subjects and portraits in the reign of Louis XI, and the second, attached to the army of Charles VIII in his Italian expedition, painted many battle scenes. These first French artists were little influenced by Italian art, and then come a group, Jean Cousin and the Clouets, especially François, who is often called Janet, who, though under Italian influence to some extent, yet showed, especially taken in connection with the sculptors Colombe and Jean Goujon, that France possessed artists capable of forming a native school. Clouet's portrait of Elizabeth of Austria, wife of Charles IX, is worthy of the great portrait painters of this time.

In Spain, as in France, there was a development of art in Columbus' Century that owes nothing to external influence and shows the originality of the time. As early as 1454 one Sanchez de Castro, "the Morning Star" of Andalusia, painted a *retablo* in the Cathedral of Seville and a fresco of St. Julian in the Church of the same city. He was still painting in 1516, so



NAVARRETE, ST. PETER AND ST. PAUL (ESCURIAL) that he must have enjoyed as long a life as many of the great Italian artists of the time. Juan de Borgona was working at Toledo in 1495 at a series of paintings which recall Perugino, yet have an originality of their own. It is not surprising, then, to find Luis de Morales, born about the beginning of the sixteenth century, called "the Divine" and hailed as the first Spaniard whose genius and good fortune have obtained him a place among the great painters of Europe. One of the master painters of this time is Juan Fernandez Navarrete, most of whose pictures were painted after the close of our century, but who had passed some twenty-five years of his life in it and been subjected to its influence and received his education from it. He is extremely interesting, because his nickname *el Mudo,* the Dumb, recalls the fact that he was one of the unfortunate deaf who, for lack of hearing, cannot speak, and yet succeeded in developing a great mode of expression for himself. Such opportunities for the defective are supposed to be quite modern, but as a matter of fact, in spite of difficulties and obstacles, genius usually finds a mode of expression. Like Italy, Spain has its schools of painting, and the school of Andalusia came into prominence under Luis de Vargas, "the best painter of the Sevillan line from Sanchez de Castro to Velasquez" (Sterling, "The Artists of Spain"). His earliest known work was completed just about the end of Columbus' Century. It is the altar-piece of the Chapel of the Nativity in the Cathedral at Seville, so often admired. Vargas is famous for his portraits, "for the grandeur and simplicity of his design, his correct drawing and fresh coloring and the great purity and grace in his female heads." * Pablo de Cespedes, born toward the end of our period, doing his work afterwards, is very well known.

In the School of Valentia, Juan de Juanes is famous for his religious pictures. His vigor and variety of invention are wonderful and his coloring is splendid. His numerous faces of Christ were unrivalled, the best perhaps being that with the Sacred Cup. His pencil was wholly dedicated to religion, and,

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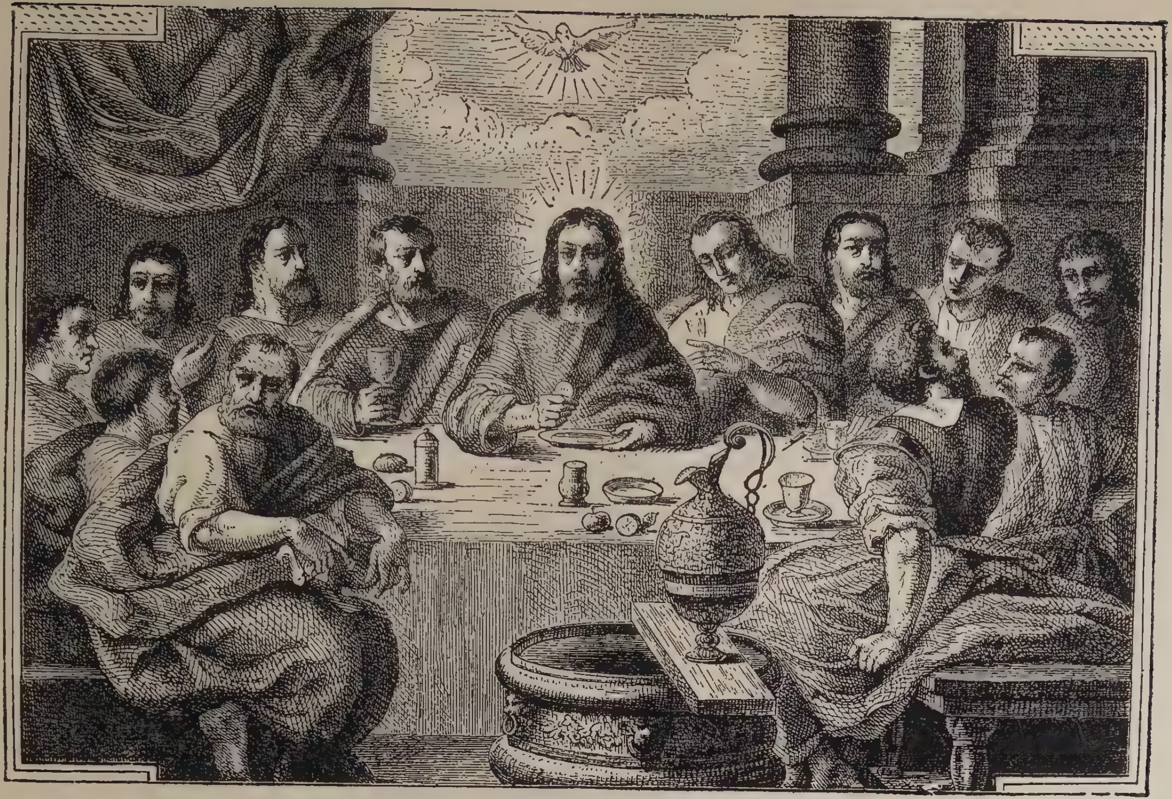
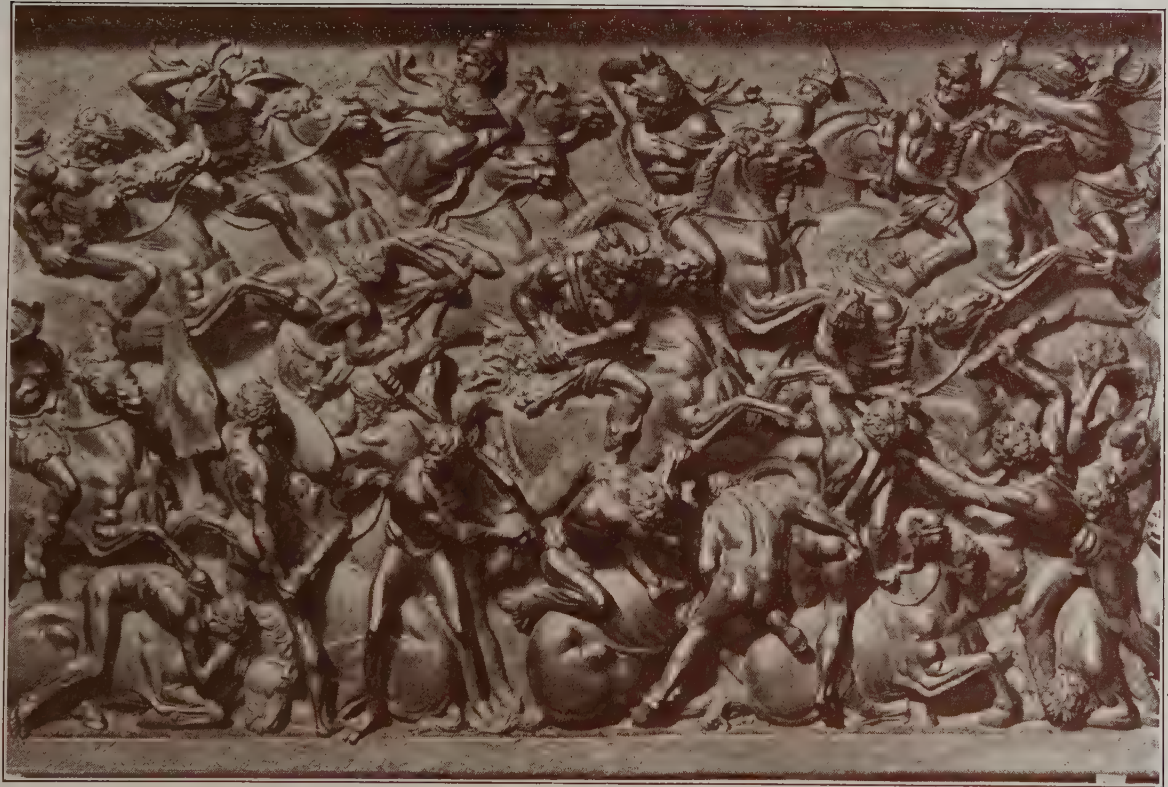
* Painting, Spanish and French, Gerard W. Smith, among the Art Handbooks.



CESPEDES, THE LAST SUPPER (CATHEDRAL, CORDOVA) according to the tradition, he habitually communicated and confessed before taking a sacred picture. He had two daughters, Dorothea and Marguerita, who are famous in the history of Spanish art, typical, illustrious women of the Spanish Renaissance.



BERTOLDO DI GIOVANNI, BATTLE (BARGELLO)

CHAPTER VI

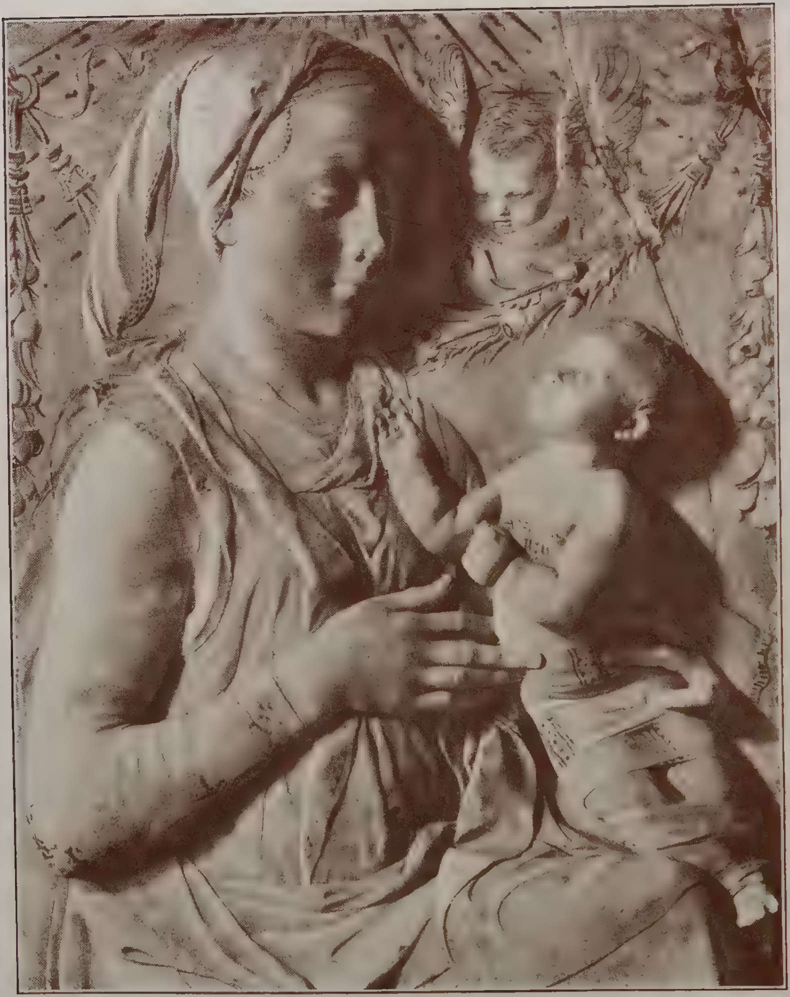
SCULPTURE IN ITALY

Columbus' Century was destined to see the creation of some of the finest sculpture since the time of the Greeks. Probably in no department of art does this period stand out as so surely surpassing any other period of modern times, or indeed any time except the Periclean, as in its power to furnish great examples of plastic art. Triumphs of sculpture were accomplished in every medium—stone, bronze, terra-cotta, wood and the precious metals. The eve of the century saw the making of some very great sculptures, which portended the wonderful development that was to come. It was in 1447 that Ghiberti completed the second pair of doors for the Baptistery at Florence, which have been the admiration of the world ever since. After this it was easy to understand that there was no development of artistic expression in plastic work that might not be expected. All the expectations possible were realized in the succeeding hundred years.

Columbus' Century was ushered in with as great a triumph in sculpture and by the work of a master as great in his maturity, which came just then, as Fra Angelico was in painting. Fra Angelico, however, had been but little touched by the Renaissance spirit of classicism, while Donatello, the familiar name for Donato di Niccolo di Betti Pardi, whom the classic impulse was to carry ahead of all contemporary artists and indeed to make a model and a subject of study for all succeeding students of sculpture, was born even before the close of the fourteenth century, but like so many of the distinguished artists of the Renaissance period, lived a long life of persistent work and great achievement, and the most important part of that work came after 1450.

His greatest triumph, the monument to Gatamelata, was set up in Padua in 1453. There are two equestrian statues that are conceded by all the world to be supreme works of art, and copies of which are to be found in many museums throughout our civilization. One of these is Donatello's "Gatamelata" and the other the "Colleoni," by Verrocchio, who was a disciple of Donatello. The earlier sculptor had seen some of the equestrian monuments of the Roman times and had wondered whether he could not imitate them, or at least accomplish the same purpose. Undaunted by the difficulties as men seem ever to have been at this time, he faced not only the problem of making the model that would express his ideas, but of putting it into the bronze form that would make it imperishable. He had to master all the problems of equine anatomy, but above all he had to make himself familiar with the details of the technique of the founders' art so as to master the process of casting so large a work absolutely in the round. Practically he had to discover a great many of these technical points for himself, and he had to invent methods of accomplishing his purpose. To most men at any time this would have seemed an almost impossible achievement. They would have been discouraged from attempting it. There were many simpler forms of his art that he might practise, and not take on his shoulders all the technics of the bronze foundry, but Donatello undisturbedly went on his way and accomplished his purpose.

There is nothing more interesting and at the same time nothing more characteristic of this period of discovery and achievement—indeed, it is a worthy prelude to Columbus' Century—than the fact that the very first equestrian statue, made in the modern times when all the difficulties, material as well as artistic, were heaped up before the sculptor, is one of the greatest monuments of that kind in the world's history. Only the "Colleoni," made a half a century later, surpasses, if indeed that is to be conceded, yet this was the very first attempt. This is not so surprising, however, if one realizes the significance of other work of this time. Within a half a century of the invention of oil painting some of the greatest masterpieces of that mode came into existence; within less than half a century of the invention of printing, some of the most beautiful books that have ever been made were printed. There has been a



ROSSELINO, ANTONIO, MADONNA

tendency in our time, as a result of much discussion of evolution, to think that such triumphs of achievement come only after long evolution and as the climax of a prolonged process of development. On the contrary genius at any time in the world's history takes hold of a mode of expression for the first time and secures a triumph in it that will be the envy and admiration of all succeeding generations.

While Donatello's success in this huge equestrian work might be expected to stamp his genius as much more fitted for monumental sculpture than any other mode of his favorite art, there is scarcely any phase of sculpture which he has not illustrated beautifully. The very spirit of youth is caught and fixed in imperishable bronze in his "St. George." There is probably no more successful attempt at the artistic rendering of the "little poor man of God" than Donatello's sculptured expression of him in his statue of "St. Francis" in the Church of St. Antony of Padua.

It was Donatello who, according to M. Muntz, the German authority on the history of sculpture, recovered the child from antiquity and gave it back to art. Some of his baby faces are among the most beautiful ever made, and yet without any of the sickly sentimentality that would make them pall. Their bodies are alive, their draperies cling or float as they touch their wearers, or are caught up by the air. Only his great contemporary, Luca della Robbia, has rivalled him in this regard, and it is doubtful whether even he has excelled him, though the world as a rule knows della Robbia for his baby faces and thinks of Donatello as having accomplished more monumental work. Donatello's "Bambino Gesu," infinitely human, and his boyish "St. John the Baptist," precociously serious, in the Church of the Vanchetoni, Florence, where they are seldom seen unless particularly looked for, are charming examples of Donatello's power of expression in child faces.

In Donatello, as in so many of these artists of Columbus' Century, the man is almost more interesting than his work. While at Padua doing the "Gatamelata," Vasari tells us that his works were held to be miracles, and they were praised so much that finally the master resolved characteristically to return to Florence. He naïvely remarked one day, "If I stayed here any longer I should forget all I have ever known through being so much praised. I shall willingly return home, where I get censured continually; for such censure gives occasion for study and brings as a consequence greater glory." His end was very sad. He, whose hands had accomplished so much, was stricken with paralysis and yet lived on for years. His pupils, with whom the great master was a favorite, took care of him, and even to the end took his suggestions, worked out his ideas and brought their work to him for criticism. Galileo, a century later unable to see after having seen farther into the heavens than any other; Beethoven, unable to hear after having written some of the most divinely beautiful music ever conceived, may be compared to Donatello, with his useless skilful hands.

Even this sad fate did not sour him, however, but only made him tenderer to those who needed help. He had no near relatives, and some distant connections, hearing that his end was near, and as Hope Rea tells in his "Donatello" (London: George Bell & Sons), to which I am indebted for most of the details of this sketch, reminded him of their existence and begged him to leave them a small property which he possessed near Prato. "I cannot consent to that, relations mine," he answered them, "because I wish, as indeed seems to me to be reasonable, to leave it to the peasant who has labored so long upon it, and not to you who have never done anything in connection with it and indeed wish for it as some recompense for your visit to me. Go, I give you my blessing." The epigram, with which old Giorgio Vasari ends his all too short appreciation of the great master, seems the most fitting close that could be made to any notice of his life, "O lo spirito di Donato opera nel Buonarroto, ó quello del Buonarroto anticipo di operare in Donato" ("Either the spirit of Donatello wrought again in Buonarotti, or the genius of Buonarotti had pre-existence in Donatello.")

Among the great artists, in the highest sense of that word, and one of the great sculptors of this period must be reckoned Luca della Robbia, with whose name there are naturally associated the names of others of this family, and particularly Andrea. Luca was chosen as one of the sculptors to execute portions of the decorative work of the Duomo at Florence. He did one of the famous *cantorias,* the two sculptured marble singing galleries which are unfortunately no longer in the Duomo itself, but in the museum at the Eastern end of the great church. This was finished in 1438, when Luca, whose years run coincident with the century, was thirty-eight years of age. Among the artists from whom the Florentine officials might have chosen for the execution of these singing galleries was also Donatello, who actually modelled the other of the pair, and Ghiberti, since famous for the great doors of the Baptistery. It is sufficient to say that when Luca della Robbia's singing gallery was finished, the Florentines realized very well that no mistake had been made in giving him the execution of it, even though he had such great rivals.

This is almost the only great work in marble that we have from Luca della Robbia. He was a scientist, as well as an artist, and he was very much interested in artistic glazed work. He devoted himself to making this as perfect as possible and succeeded in adding this as a wonderful new medium to sculpture. Like so many other of the artists, painters and sculptors of this time, he was originally a goldsmith, but became ambitious of doing higher things than those usually committed to the craftsmen. Vasari tells us that he carved all day and drew all night, keeping his feet warm through the long winter evenings by covering them up in a basketful of carpenter shavings. He worked at the glazing of terra-cotta with the idea at first apparently of preserving his clay models by baking them.

Working in this new medium he brought to the execution of the models for it all his genius as a sculptor and succeeded in accomplishing some of the most beautiful results. He developed the medium so as to secure charming color, creamy white figures that stand out from a cloudy blue background, with a glaze that is perfect and joints that are almost invisible. It is only in comparatively recent years that a due meed of appreciation has been accorded to della Robbia's work once more, though his contemporaries valued him at his true worth, but in compensation for the neglect his pieces are now among the most costly works of art whenever they turn up at public sales. While devoting himself to the new artistic modes, he accepted commissions in both bronze and marble for the embellishment of Florence, and the bronze doors of the sacristy of the Duomo are his, as well as certain reliefs in marble on the Campanile.

"In fact," as Hope Rea says in his "Tuscan and Venetian Artists,"* "the total amount of work produced by him in the middle twenty years of his life shows him to have been one of those strenuous laborers in art, the like of whom have hardly been seen before or since the years of the Renaissance." Luca never married, but he gave every opportunity to his nephew, Andrea della Robbia, who was an apt pupil, but who confined himself practically entirely to the new style invented by his uncle. In spite of what might be expected, the young man, with the advantage of his uncle's training and the possession of his uncle's secrets, did not do better work, though the amount of it that he turned out made the della Robbia terracotta an important part of Florentine art. In his hands, and those of his son Giovanni, what had been as pure an art as any form of sculpture came to be merely a decorative craft. Andrea's many beautiful pieces, however, and especially the well-known "Bambine," the swaddled infant medallions of the Hospital of the Innocents, have been very popular at all times and have entered into renewed popularity in our day. The great series of incidents of St. Francis' life, executed by Andrea for the Franciscan monastery of La Verna, represents the climax of his art work. He was thoroughly sympathetic with the early Franciscan traditions and he expressed the details of them beautifully.

One of the greatest of the sculptors of the Renaissance, who must indeed be reckoned among the greatest artists of all times, is Leonardo da Vinci's teacher, Andrea del Verrocchio. He was one of the wonderful Florentine artists whose genius was recognized by Lorenzo the Magnificent and was given the opportunity to express his artistic conceptions worthily by this liberal patron of the arts and literature. Three of his great

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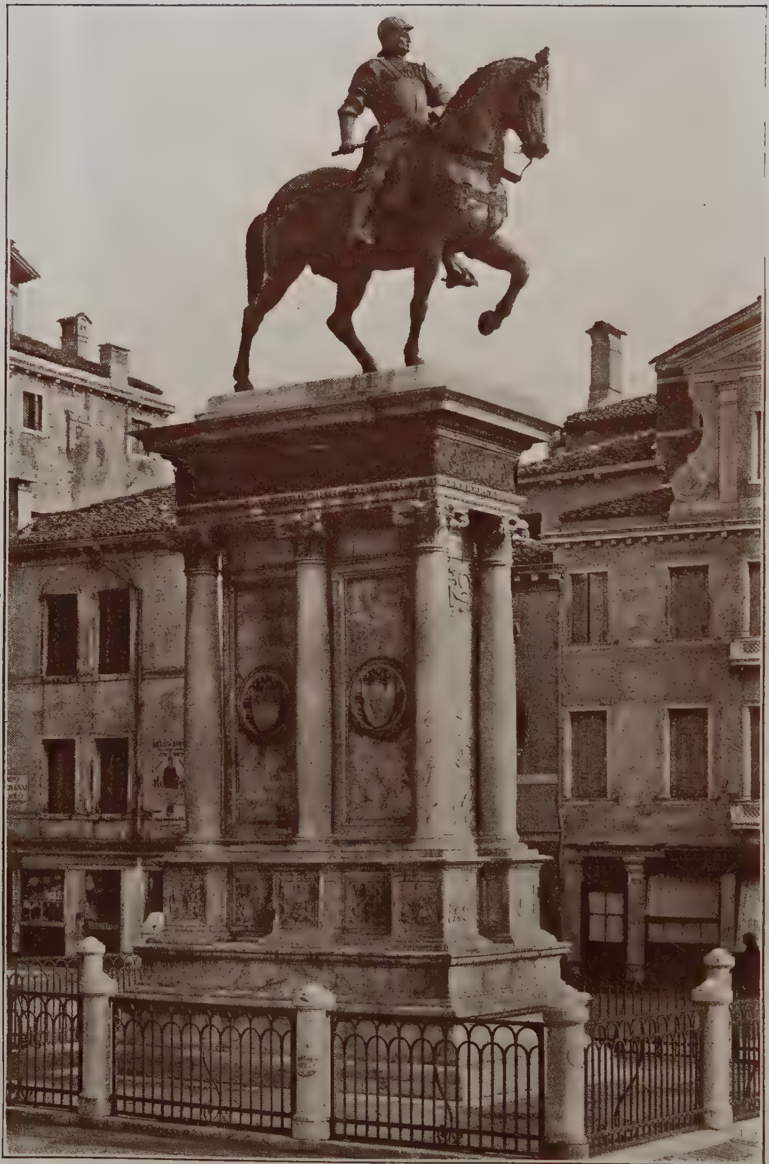
* "The Tuscan and Venetian Artists: Their Thought and Work," by Hope Rea. London: J. M. Dent & Co., 1904.



DONATELLO, GATAMELATA

works, the tomb of Piero and Giovanni de Medici in the Church of San Lorenzo; his "David," which is in the National Museum, the Bargello in Florence and the "Child Holding a Dolphin," now in the courtyard of the Palazzo Vecchio, were all three executed for Lorenzo. These are all in bronze, but with the versatility of the men of his time, Verrocchio could express himself in other media just as charmingly. Michel has said of the terra-cotta "Madonna" made for the Hospital of Santa Maria Novella that in it "supreme distinction of thought is combined with the most scrupulous observation of nature." The famous marble bust of a "Flower Girl" is in the Bargello. A silver *basso-rilievo,* the "Beheading of John the Baptist," is now in the Cathedral Museum at Florence.

His two masterpieces are "The Incredulity of St. Thomas" and the statue of Colleoni, the celebrated *condottiere* who had commanded the Venetian troops. Both of these are in bronze. Little as the deep feeling of the scene between Christ and the doubting Thomas might seem apt to lend itself to expression in sculpture, Verrocchio has succeeded in making an extremely beautiful and touching work of art. The Divine Humanity, urging Thomas the doubter to put his hand into His pierced side, is a wonderful realization of one of the most pathetic of incidents. The triumph of Verrocchio's genius, however, is the "Colleoni." It is probably the greatest equestrian statue ever made. His contemporaries declared that Leonardo da Vinci's figure of the Duke of Milan on horseback surpassed it. Sometimes doubt is expressed as to whether Donatello's "Gatamelata" does not rival it. That question must be left for great artists and sculptors to decide, and in the meantime there is no doubt at all that Verrocchio was one of the greatest sculptors who ever lived. Burckhardt declared that "we have a right to call this equestrian statue the finest in the world."

Unfortunately Verrocchio was seized with a chill while casting it and died at the early age of forty-three, or we might have had some still more wonderful work from him. He is a typical many-sided genius of the Renaissance, though in sculpture particularly only two, perhaps three, of his greatest contemporaries ever equalled him; it is even doubtful if they have excelled his "Colleoni," yet everything that he ever did was an advance on his previous accomplishment. His disciple, Leopardi, who finished the casting of the "Colleoni," is another great sculptor of the time who, in any other period, would be looked upon as a supreme artist. He has shone with reflected glory, besides, for his part in the "Colleoni," though it is very doubtful whether any but very small credit is due to him for the completion of this work which Verrocchio had left in such a state that but little was required to make it what it had been ever since, one of the world's greatest monuments of sculpture.

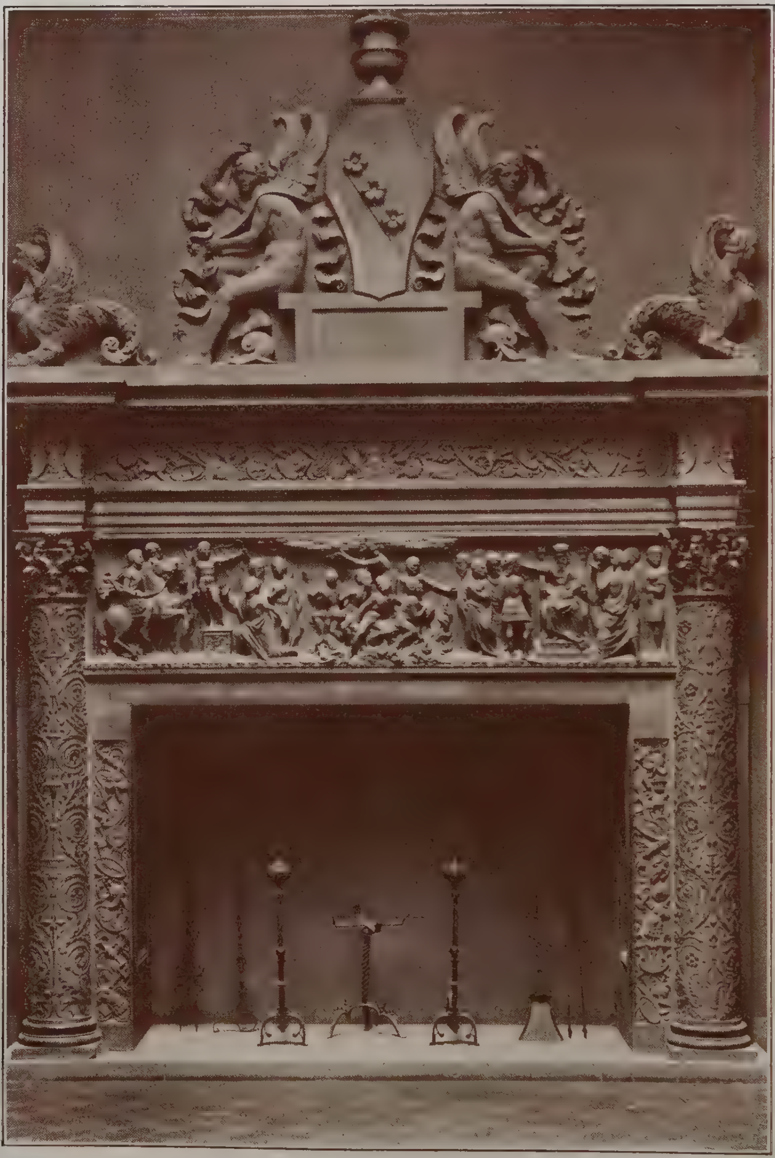
A great sculptor of the Renaissance, whose career presents many other features of interest, however, which have made him famous, is Benvenuto Cellini. He was born in 1500 and, like many of the artists and most of the sculptors of the time, began his life work as an apprentice to a goldsmith. After a troubled early manhood in Rome and other Italian cities, during which he executed some medals that are among the best of their kind ever made, and various ornamental pieces in the precious metals, he was for a time at the court of Francis I. Afterwards he worked in Florence, lending his genius to the fortification of the city during the war with Siena. While his career is entirely exceptional among the great artists of the time it is often taken for a type of the restless, rather unmoral than immoral, character that was supposed to be produced by the paganizing influence of the New Learning. The true types of Columbus' Century among the artists, however, are such men as Raphael, Leonardo and Michelangelo, deeply intent on their work, anxious only for the opportunity to accomplish high artistic purpose and without any of that restless unmorality that is at least supposed to have characterized Cellini. It would be much nearer the truth to point to the lives of such men as Fra Angelico or Fra Bartolommeo, happy in their monastery homes, or Correggio, who spent his time so peacefully with the religious of the little town in which he lived, than to appeal to Benvenuto's chequered stormy career as typical of the Renaissance.

Cellini's autobiography, as great a work of imaginative art, very probably, as any that he ever executed in plastic materials, has attracted as much attention in literature as his great sculptures have in art. His name, then, has become familiar to many who know nothing about the intimate personal careers of the great artists of the time and who will in all good faith continue to draw their conclusions as to the character of the men of the Renaissance from Cellini's rather boastful proclamation of his successful vices, though this exactly represents the exception which proves the rule to be the opposite. In spite of his forbidding picture of himself he had moments of intense religious feeling and highest inspiration. Anyone who has seen his famous "Christ" in marble in the Escurial will not be likely to think that he was entirely lacking in deep religious feeling. His famous bronze group of "Perseus holding the Head of Medusa," to which deservedly the Florentines have given a distinguished place in front of the old ducal palace at Florence, is one of the masterpieces of modern sculpture. W. M. Rossetti spoke of it in his article in the "Encyclopædia Britannica" as "a work full of the fire of genius and the grandeur of a terrible beauty. One of the most typical and unforgettable monuments of the Italian Renaissance." His story of the casting of this great monument shows the difficulties under which the sculptors of the time labored, and yet how triumphantly they overcame technical obstacles and made great works of art.

While so great as a sculptor in monumental work, Cellini never thought art objects of small size beneath his attention, and like Raphael, willing to make the cartoons for the tapestries of the Sistine Chapel and composing great pictorial scenes as their subjects, so Cellini, with a true Renaissance artistic spirit, modelled beautifully any and every form of work in metal. He modelled flagons, bells and even rings and jewels, designed coins and medals for the Papal mint and for the Medici at Florence. It has been said that everything minted under his direction attained the highest excellence. His work in *alto-rilievo* was as fine as that in *basso-rilievo*. All over Europe there are well-authenticated specimens of smaller pieces from his hands, a bell in the Rothschild collection, a gold salt-cellar in Vienna, a shield elaborately wrought in Windsor Castle and even beautifully chased armor, such as he made for Charles IX of Sweden, which may be seen at Stockholm.

Of course, for any proper estimation of the Italian sculpture of this period, the work of Leonardo da Vinci and Michelangelo must bulk very large. They have been treated in separate chapters, and there is room here only to say that, while unfortunately we have almost none of Leonardo's sculpture, we have from his own great artistically critical generation traditions of magnificent accomplishment. As for Michelangelo, his own generation admired him only too much, and the almost inevitable imitation of his genius brought on decadence in plastic art much sooner than it would otherwise have come. His faults were imitated without any of the genius in power of expression that condones them in the great originals. If Michelangelo's sculpture had been the only contribution of this period to plastic art, that would have been sufficient to place it high among the periods of greatest productivity in this department of art. As it is, there were men who preceded Michelangelo whose genius is unquestioned and whose achievements have been recognized by the world ever since.

The roll of sculptors of the century worthily closes with the name of John of Bologna, who was born at Douai in Flanders, but passed all his life in Italy, and it is hard to know whether to group him with the Italian or extra-Italian sculptors. Most of his great work was done after the end of our century, but as he was probably more than twenty-five years of age when the century closed, and received all his training and inspiration from the men of our time, he deserves a place here. John, who owes his name of Bologna to the fact that one of his greatest works, the bronze "Neptune," was prepared for the fountain of Bologna, was often called by his contemporaries *Il Fiammingo,* in reference to the place of his birth. Probably no sculptor of his time has been more popular all down the centuries than he, and there are very few with any claim to education and culture who do not know his wonderful figure of "Mercury," with winged feet borne aloft upon the breezes blowing out of the mouth of Aeolus, the god of the winds. There has probably never been a more masterly expression of light, easy, graceful movements in statuary than this. It is for his power to express movement



BENEDETTO ROVEZZANO, CHIMNEY PIECE

within the limitations of plastic art that John is famous. His "Rape of the Sabines" in the Bargello in Florence is declared "to have come nearer to expressing swift-flashing motion and airy lightness than has ever been accomplished before or since." He lacked the faults of exaggeration of the later Renaissance and had many of its best qualities.

The sculptured work on and in the Certosa at Pavia belongs mainly to Columbus' period. It remains one of the great architectural and sculptural monuments of the world. It has its defects, which are mainly due to over-luxuriousness of decoration and failure to make the decoration and the structure itself harmonize, but it remains a beautiful example of the art of the time. It has continued to be ever since a place of pilgrimage for art lovers, and it will doubtless continue to be so for as long as this present phase of our civilization lasts. It contains some most effective work, and while not all of its sculpture is conceived in the true spirit of what belongs to plastic art, there is much of it that has never been surpassed except by supremely great sculptors, the men who are looked upon as the world's geniuses in this department. When the Certosa is compared with some of the churches which in the seventeenth and eighteenth centuries were thought to be the highest expressions of artistic excellence, the taste and the ability of the sculptors and architects of the Renaissance become manifest.

Perhaps nothing brings out in greater relief the accomplishment of the sculptors of this period than the deep decadence of the art in the succeeding century. The only name that stands out with any prominence during the seventeenth century is that of Bernini, a man of undoubted talent, who, in a better period of art, might have been a sculptor of the first rank. Much of his monumental work, however, is thoroughly inartistic and has been declared "a series of perfect models of what is worst in plastic art." It is still more illuminating to learn that this work was looked upon in his time with the loftiest admiration. No sculptor in any period had quite so much fulsome praise. The eighteenth century sank, if possible, still lower in all that pertained to true sculpture, and sculptors often of great technical skill occupied themselves in making such trivialities as statues covered with filmy veils, through which forms and features could be seen, and other tricks of art. It was not until Canova came at the end of the eighteenth century that there was any gleam of hope for sculpture, and even this was eclipsed to some extent by the classic formalism which came in with it.

CHAPTER VII

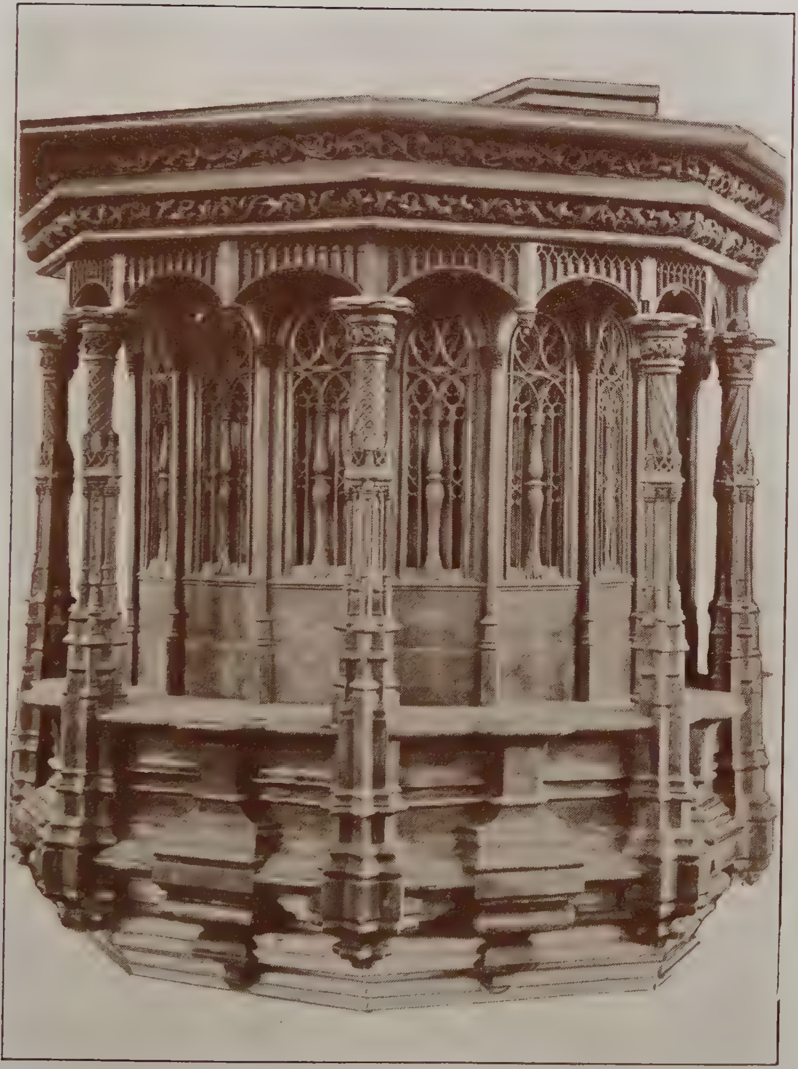
SCULPTURE AND MINOR ARTS AND CRAFTS OUTSIDE OF ITALY

While Italy excelled in sculpture at this time, as indeed in every department of art, the other countries of Europe practically all enjoyed a magnificent period of development in plastic art, not a little of it thoroughly national in character and some of the most precious of it quite apart from Italian influence. Besides, there was a marvellous accomplishment in the subsidiary arts and artistic crafts well deserving of mention which confirms the place of this period among the greatest of productive eras. A very noteworthy development of sculpture took place in the Netherlands, where in the midst of the rising democracies and the commercial prosperity there was a great outburst of artistic genius. Wealthy patrons had the good taste to recognize artistic genius and encourage it. There has never been a period or country when tradesmen proved more discriminatingly beneficent. It would be indeed surprising if the country that produced the Van Eycks and the first great evolution of oil painting with the work of Van der Weyden, Memling, Quentin Matsys, Gerard David and so many others on canvas, should not have given us sculpture worthy of this fine artistic development.

We do not, as a rule, know the names of the individual sculptors in the Netherlands, because apparently they looked upon themselves as artist artisans, whose duty it was to do their work faithfully and thoroughly, looking for no reward of fame and no special recognition beyond their own consciousness of having done good work. Their sculptures are to be seen in many places, in the cathedrals, the town halls and the other beautiful buildings erected at this time. Louvain, Brussels and many of the other towns of what is now Belgium particularly must have had many artistic workers in stone who well deserved the name of sculptors. They executed not only beautifully decorative work, but also full-length statues, busts, medallions in high and low relief, and plastic ornaments of all kinds. The high quality of their accomplishment can scarcely be disputed, and yet the lack of their names has often left the impression that there were no great sculptors at this time; the fine sculpture that has come down to us is, however, an emphatic contradiction of any such notion.

Some of the work done in the humble medium of wood is particularly interesting. The charmingly artistic wood-carving of the consecration of St. Eloi in the Church of Notre Dame at Bruges is a striking example. The choir seats of the Church at Louvain are quite as worthy of high praise, and the wood-carvings in the choir at Harlem so often admired come from this same period. Perhaps one of the best examples of the wood-carving of the time is the pulpit of the Cathedral at Leyden, which was made in this century.

The tombs of Mary of Burgundy and of Charles the Bold in the Church of Notre Dame, Bruges, still further emphasize the sculptural capacity of these generations, though, from the rarity of large masterpieces, there were apparently but few opportunities to display it on a monumental scale. These monuments, especially the older one, are supremely great works of art. A comparison of them is very illuminating for the history of sculpture in our period. Though constructed scarcely half a century apart, they are executed under the influence of the two typical but very different art impulses of this century. The tomb of Mary, made by Peter Beckere of Brussels in 1502, is mediæval and Gothic in spirit. That of Charles, made by order of Philip II just before 1560, is a distinctly Renaissance work. The later is much more modern and obvious in the meaning of all its symbolism, but one need not be an artist to see how much more genuinely artistic is the earlier tomb. At first glance one seems almost a replica of the other, except, of course, for the figure of the deceased and the subjects of the decorations of the sarcophaguses, but it takes but little study to discover what a descent there is in the art quality of the Renaissance work. Nowhere can one see the

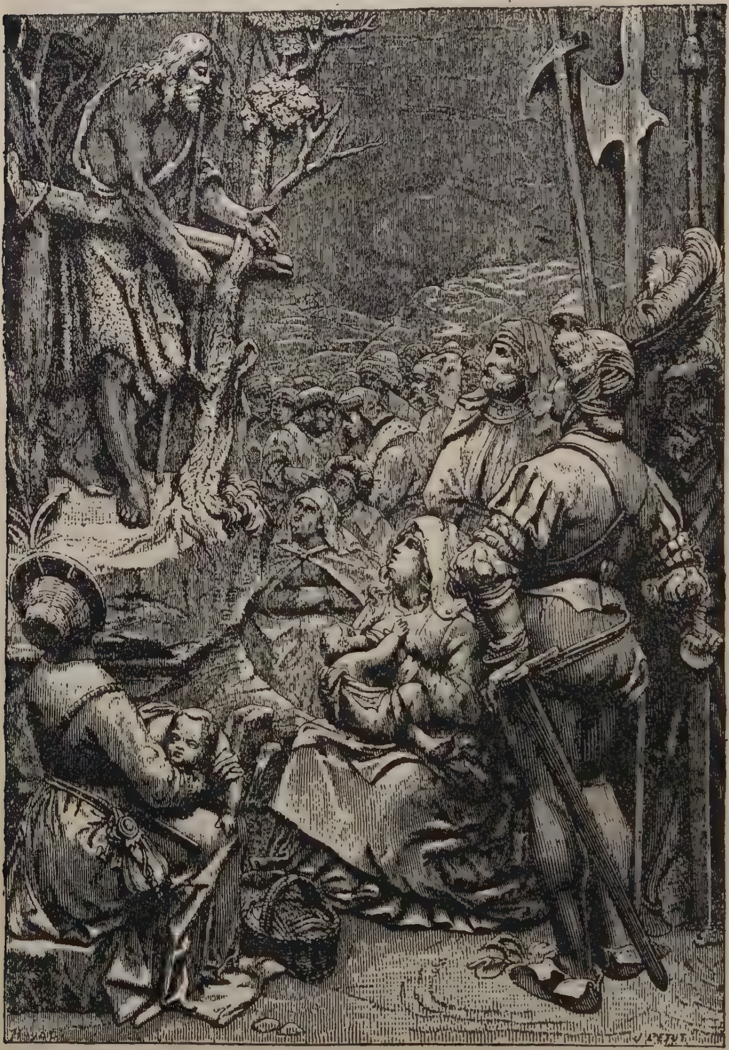


PULPIT, LEYDEN

value of the old and the new nor compare Gothic and Renaissance so easily as here.

Sculpture developed very wonderfully in Germany during the first half of Columbus' Century. The commercial prosperity of the time, the development of industries and the increase of trade caused an inflow of wealth into many of the cities of Southern Germany particularly, and not a little of this wealth found its way through the generosity of donors into the decoration of their churches. The people's faith was deep and full. Reform had not yet come to disturb it. Germany devoted itself especially to sculptured decoration in wood. An immense number of carved altars, pulpits, choir screens, stalls, tabernacles and other church fittings of very great elaborateness and usually fine artistic quality were produced. One of the first of the great German wood-carvers was Jörg Syrlin, who executed the famous choir stalls of Ulm cathedral, so richly decorated and ornamented with statuettes and canopies. His son of the same name did the great pulpit in the same cathedral and was given the commission for the elaborate stalls in Blaubeuren church. These were finished within a year of the discovery of America. At Nuremberg wood-carving also reached a high degree of excellence, and Veit Stoss of Nuremberg, though notorious for his escapades, was looked upon as the most skilful of artists for church woodwork. He was invited to Cracow to do the high altar, the tabernacle and the stalls of the Frauenkirchen. His masterpiece is the great wooden panel nearly six feet square, carved toward the end of the fifteenth century, with an immense number of scenes from Bible history, which is now among the treasures of the Nuremberg town hall.

Albrecht Dürer himself with Renaissance versatility took up sculpture and did not despise even the humble medium of wood. He was a clever wood-carver and executed a tabernacle with an exquisitely carved relief of Christ on the Cross between His mother and St. John, which still may be seen in the chapel of the monastery at Landau. The British Museum possesses a number of miniature reliefs in boxwood which were also made by Dürer, though he early abandoned wood-carving for art work in materials that might be expected



DÜRER, ST. JOHN BAPTIST PREACHING (BAS-RELIEF IN CARVED WOOD)

to be more enduring. The influence of the wood-carving of this period can be noted in the work of the sculptors of the time, even after they abandoned it for stone and bronze.

Adam Kraft's great Schreyer monument in St. Sebald's Church at Nuremberg, for instance, shows very clearly the influence of wood-carving. There is no doubt, however, about his high place among the sculptors, even of this glorious period, in the art.

The Vischer family for three generations executed a series of very great monuments in bronze, especially during the second half of Columbus' Century. The genius of the family was Peter Vischer of the second generation, who was admitted as a master sculptor into the sculptors' guild of Nuremberg in 1489. Perhaps the most interesting thing about his work is his absolute mastery of the technique of his art. Few men have ever succeeded in casting in bronze to such good effect. After having finished the magnificent tomb of Archbishop Ernest in Magdeburg Cathedral, in which some traces of Gothic influence still linger, Vischer obtained the opportunity for his masterpiece in the beautiful canopy for the shrine of St. Sebald at Nuremberg, a veritable triumph of plastic art. Modern critical appreciation of it has very well corroborated contemporary admiration. Its details are a never-ending source of interest and study. Some of the statuettes of saints attached to the slender columns of the canopy are among the most charming examples of their kind that we have. They have grace and dignity, as well as great expressiveness. Near the base there is a small, evidently portrait, figure of a rather stout, bearded man wearing a large leathern apron and holding some of the sculptor's tools with which he usually worked that is considered to be a figure of Peter himself. It is a marvel of clever realism.

The story of the execution of this monumental masterpiece is of itself a lesson in the art work of the time. Peter was assisted by his sons, and they worked at it almost continuously for more than ten years, between 1508 and 1519. It was often extremely difficult for them to secure money enough for their work from the authorities who had agreed to pay, though stingily enough, yet they devoted themselves to it as whole-heartedly as if it was a munificently rewarded work. The smaller figures are executed with marvellous attention to detail, and every feature of the work, the graceful scroll foliage so abundantly used, the dragons and even the grotesques, all the details which crowd every possible part of the canopy, were executed evidently without the slightest regard for the time and labor which were required for them and with the good workman's delight in his work.

It has sometimes been said that these Teutonic sculptors of Nuremberg were mere workers in bronze who reproduced in that material the ideas and drawings of others. As pointed out by Cecil Headlam in his little book on "The Bronze Founders of Nuremberg," * "The evidence of our eyes, which enable us to trace the development of their style, would be enough to refute that opinion even if we were without the documentary evidence which shows that father and sons alike were patient and painstaking draughtsmen as well as craftsmen all their lives." There is no doubt at all that they adopted and adapted many ideas from the great Italian sculptors of their own and the preceding time. They were deeply influenced by Sansovino, Donatello, Leonardo da Vinci, but they were not mere imitators and they were not plagiarists in any sense of the word. To quote Mr. Headlam again (page 131):

"They could apply the lessons they had learnt from their careful study of the Italian Masters, and apply them with successful originality. It is in the energy which lives in the King Arthur, the simple yet vigorous composition and execution of bas-reliefs, such as the Healing of the Blind Man of St. Sebald's tomb, or the Tucher Memorial, with their wholly admirable treatment of lines and planes; it is in the tender and spiritual feeling infused into the greatest of their bronze portraits that the unanswerable vindication lies of an imitation proved not too slavish and of a study that has not deadened but inspired."

Other cities in Southern Germany, as Augsburg and Innsbrück, and at least one city in Northern Germany, Lübeck, are in possession of bronze sculptures which show how thoroughly alive was the spirit of plastic art all over Germany at this time.

Innsbrück possesses a series of bronze statues, all of them

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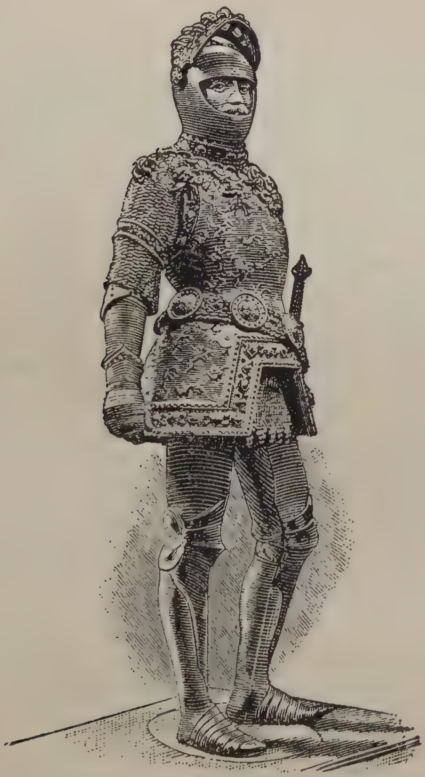
* "The Bronze Founders of Nuremberg: Peter Vischer and His Family," by Cecil Headlam, B. A., formerly Demi of Magdalen College, Oxford. London: George Bell & Sons, 1906.

executed in the first half of the sixteenth century, which has always attracted the attention of the world artists ever since. There are twenty-eight colossal bronze figures around the tomb of the Emperor Maximilian which stands in the centre of the nave of the Cathedral. They are designed to represent the heroes of the olden time and one of them, usually looked upon as the finest, is an ideal statue of King Arthur of the Briton legends, famous for the nobility of the face and pose. He is represented in the plate armor of the early fifteenth century. The statue of Theodoric is also considered to be not only a very fine example of the work of the period, but also one of the world's great bronze statues. The difficulties encountered



KING ARTHUR (INNSBRÜCK)

in the accomplishment of the casting of the bronze for these were so great that the Emperor invited Peter Vischer from Nuremberg to superintend at least this portion of the work and it is probable that his influence was felt also on the modeling. The designs are usually attributed to local artists at Innsbrück, however, of whose names we are not sure. In nothing are these older periods so different from ours as in the utter neglect of artists to make any effort to secure their personal fame.

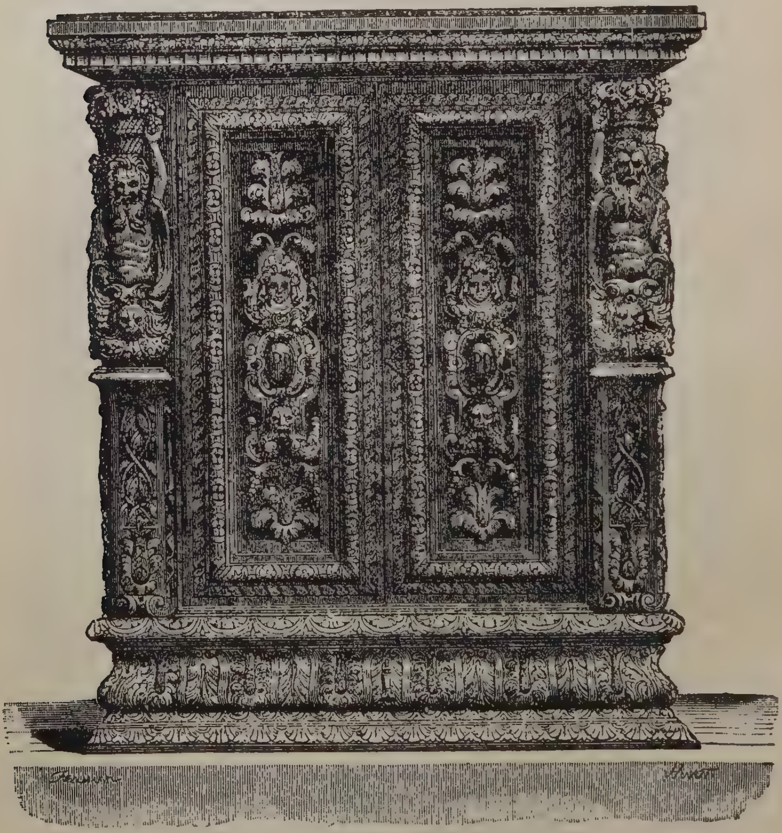
HENRY VIII ON FIELD OF CLOTH OF GOLD (FROM THE BAS-RELIEFS OF THE HÔTEL BOURG HÉRALDE, ROUEN)

In France even before the time of the Renaissance, or at least before the effect of Greek ideas was felt, there was a magnificent development of sculpture, an inheritance from the older period of the thirteenth and early fourteenth centuries which had left such magnificent monuments as the tombs in St. Denis, Le Beau Dieu at Amiens and the statues in the porch of the cathedral at Chartres. The first of these French Gothic sculptors of Columbus' Century is Colombe, trained in Flanders, who founded a school of sculpture at Tours. He executed the tomb of Margaret of Austria and her husband Duke Philibert of Savoy in the Marble Church of Brou. Tours became a great centre of art in the latter half of the fifteenth century. Its name, the town of spires, indicates that there had always been aspirations after effect in their ecclesiastical architecture and this reached a culmination in statuary at this time. With Colombe his nephews worked while Jean Juste and his son collaborated in the poetic tomb built in honor of the son and daughter of Charles VIII in the Cathedral of Tours. Here also they erected the famous tomb of Louis XII and Anne of Bretagne, which has since been carried to St. Denis. The Justes had a power of putting touching human qualities into marble that has always given a special interest to their work. Jean Fouchet probably made at this time the lovely tomb of Agnes Sorel at Loches which has been so famous and has helped to make Loches a favorite pilgrimage place ever since.

French sculpture touched by the Renaissance reached a further triumph of artistic development in the first half of the sixteenth century. Two names particularly stand out, those of Jean Goujon and Germain Pilon. Though the first signs of that affectation and mannerism which developed as the Renaissance progressed are to be already noted in their styles, they combined great technical skill with refinement in modelling. Undoubtedly the greatest of the French sculptors of the time was Jean Goujon, whose most pleasing work is the marble group of Diana reclining beside a stag, which exhibits a power beyond that of any except the greatest Italian sculptors. He executed a series of sculptures for the older part of the Louvre which beautifully harmonizes with the architecture. His reliefs for the Fountain of the Innocents are one of the best known of his works and have a charm all their own.

The other great sculptor, Germain Pilon, trained under the influence of the Renaissance, did his best work just after the close of Columbus' Century. His group of the Three Graces bearing on their heads an urn containing the heart of Henry II, executed for Catherine de Medici, has been deservedly very much praised. Other men, Maître Ponce and Barthélemy Prieur, did work that has attracted much attention about this same time. A fine portrait effigy of a recumbent figure in full armor of the duke of Montmorency, which has always attracted the attention of those of critical artistic taste and is one of the treasures of the Louvre, is the work of Prieur.

The story of subsequent decadence is as striking in France as in other countries. No sculpture of any significance appeared during the seventeenth century, though some of the artists of the time exhibited great technical skill. Indeed it was not until the coming of Hudon, at the end of the eighteenth and the beginning of the nineteenth century, that there is any relief from the story of mediocrity or worse, and



GOUJON, JEAN, JEWEL CABINET

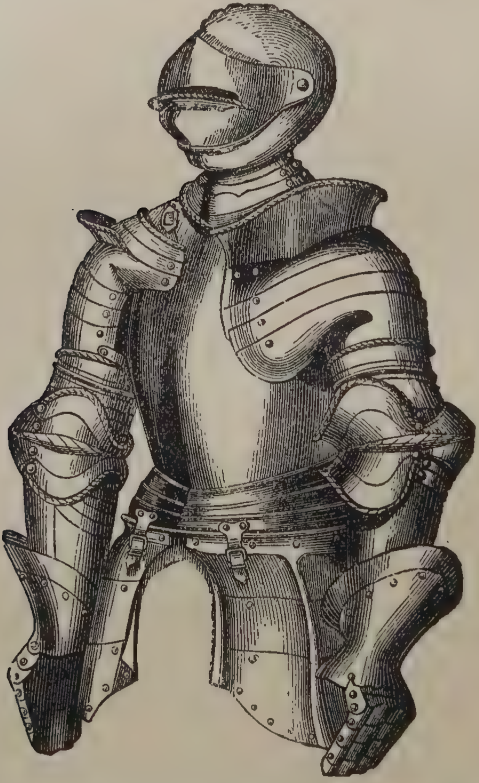
in his time the plastic arts had reached a very low ebb. Modern French sculpture is the result of the movement begun by Hudon, but it is separated from the Renaissance by nearly two centuries of debasement.

A very interesting and valuable development of the arts and crafts that came in the Netherlands at this time was in the execution of art tapestries. This is the period when weaving of all kinds came to its highest perfection all over the world. The fifteenth and sixteenth century Oriental rugs command the highest prices and are among the most beautiful examples of carpet weaving that we have. In the Netherlands and in France tapestry reached its highest perfection and the examples executed at this time are now the precious treasures of governmental museums and similar public institutions almost without exception and probably will not change hands again because they are looked upon as too valuable for educational purposes and the uplifting of popular taste for public authorities ever to part with them. In the Netherlands particularly, tapestry-making reached a climax of perfection. After Michelangelo had been asked to decorate the ceiling of the Sistine Chapel, Raphael was requested to do a series of cartoons for the tapestries to be hung around the walls of it, which were to be executed in Flanders. After their completion they were the admiration of Rome, and we have many expressions of praise for them from the great men of the time whose critical ability in all matters relating to art cannot be doubted.

Vasari has an enthusiastic tribute, which even discounting his well-known tendency to praise overmuch under certain circumstances, still serves to show how thoroughly satisfied this period of great art was with these masterpieces. He said:

"One is astonished at the sight of this series. The execution is marvellous. One can hardly imagine how it was possible, with simple threads, to procure such delicacy in the hair and beards and to express the suppleness of flesh. It is a work more Godlike than human; the waters, the animals and the habitations are so perfectly represented that they appear painted with the brush, not woven."

The tapestries were first shown the day after Christmas, 1519, in the Sistine Chapel for which they had been designed. Some of the greatest of the Renaissance scholars and artists and literary men were present on the occasion. It was the custom at that time to send as Ambassadors to Rome from foreign countries, distinguished scholars and amateurs. Many of these were present. All were enthusiastic in their admiration. Rumor said that they were quite unable to express all that they felt for these new works of art. Everyone present, one of the guests said in a letter to his sovereign, was speechless at the sight of these hangings and it is the unanimous opinion that nothing more beautiful exists in the universe. Another of those present wrote:



ARMOR (FIFTEENTH CENTURY MUSEUM OF ARTILLERY, PARIS)

"After the Christmas celebrations were over, the Pope exposed in his chapel seven tapestries (the eighth not being finished) executed in the West (in Flanders). They were considered by every one the most beautiful specimens of the weaver's art ever executed. And this in spite of the celebrity attained by other tapestries—those in the antechamber of Pope Julius II, those made for the Marchese of Mantua after the cartoons of Mantegna, and those made for the King of Naples. They were designed by Raphael of Urbino, an excellent painter, who received from the Pope 100 ducats for each cartoon. They contain much gold, silver and silk, and the weaving cost 1,500 ducats apiece—a total of 16,000 ducats ($160,000) for the set—as the Pope himself says, though rumor would put the cost at 20,000 golden ducats."

Even this account gives evidence that it was not because of their rarity, but on account of their unique quality that the Sistine tapestries were so much admired. As a matter of fact, most of the ruling court families of Italy ordered tapestries for themselves that have since become famous and most of these were made in France and in the Netherlands.

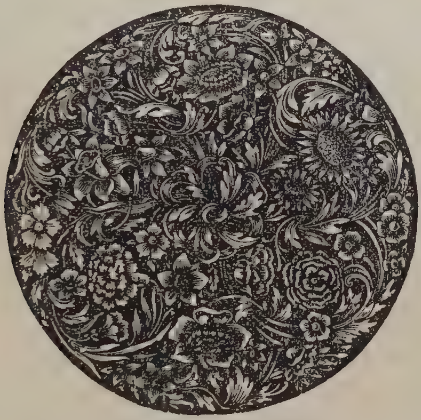
There is absolutely no doubt left now that this is the period when the best tapestries ever made were woven. George Leland Hunter in his "Tapestries, Their Origin, History and Renaissance"* says that the Golden Age of tapestries was the Gothic Renaissance Transition—the last half of the fifteenth century and the first half of the sixteenth century—the hundred years during which Renaissance tapestries began and Gothic tapestries ceased to be woven, while many of the greatest tapestries were of mixed style like the story of the Virgin at Rheims. There are sets woven at various times during this period which are among the greatest tapestry treasures of the world. The largest of all these sets is the story of St. Rémi in the church of the same name at Rheims—sixteen feet high with a combined width of 165 feet. When exhibited at the Paris Exhibition in 1900, one of them, wrong side out in order to display the richness and solidity of the ancient unfaded colors, attracted the attention of amateurs from all over the world. The story of St. Étienne in nine pieces at the Cluny Museum

*John Lane Co., New York, 1912, pp. 33.

at Paris was presented to the Cathedral of Auxerre in 1502.

As a matter of fact there was scarcely a cathedral or monastery in France at this time that did not come into the possession of beautiful tapestries that are now very precious treasures. During recent years the value of such tapestries have increased very much and our millionaires have been willing to spend almost fabulous sums in order to get possession of them. We have had the opportunity here in America through the munificence of the late Mr. Pierpont Morgan to see some of them in the Metropolitan Museum and have learned to realize that the praise of them is well deserved. Mr. Hunter says that " the most famous tapestries in the world are the Renaissance tapestries, though the only distinction in most cases between the Gothic tapestries of the end of the fifteenth and the Renaissance tapestries at the beginning of the sixteenth, is that in one, whatever architecture or ornamentation or decoration is used has Gothic motives, while the models for these same details in the later tapestries is drawn from the Renaissance." The Brussels tapestries of the early sixteenth century are particularly beautiful and are the despair of the modern tapestry makers. Other Flemish cities, however, Arras, Tournai, Bruges, Lille, Antwerp became famous for their tapestries and Delft, in Holland, was a worthy rival. The art seems to require too much patience for our modern artisans to compete with their brethren of the old time, but doubtless with the rise and appreciation of artistic handicraftsmanship and the demand for charming decoration of homes and public buildings regardless of cost, we may look confidently for a development even in this line.

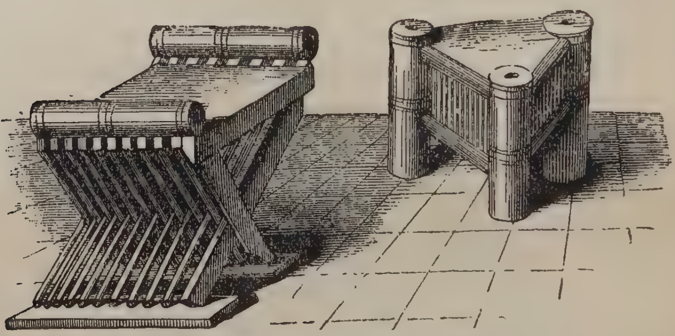
The other phases of the arts and crafts also developed very wonderfully outside of Italy as well as in the peninsula. Beautiful vessels for altar use, chalices, candlesticks, crucifixes and the like were made, and indeed this is the supreme period of their manufacture. Some of the chalices of this time were made by distinguished sculptors who felt that they could not devote themselves to more suitable art work than this for Church purposes. Under the inspiration of deep religious feeling some even of the smaller pieces are among the world's great works of art. Benvenuto Cellino made morses, chalices and crucifixes that are famous. Many of these were executed for patrons outside of Italy. His well-known crucifix in the Escurial near Madrid, made for Philip II, is a typical example. Processional crosses lent themselves to decorative effect very well, and some of them from this time are indeed very beautiful works of art. The same application of artistic craftsmanship was to be noted with regard to nearly everything meant for the service of the Church or for use in municipal building for the decoration of municipal property. The well-known iron well railing executed, it is said, by Quentin Matsys (or Massys), when the artist was but a blacksmith and had not yet taken up painting, is a typical sample of the combination of the beautiful and useful which characterizes so much of the work of this time and carries away every point of admiration.



SCENT BOX (CHASED GOLD, FRENCH, FIFTEENTH CENTURY)

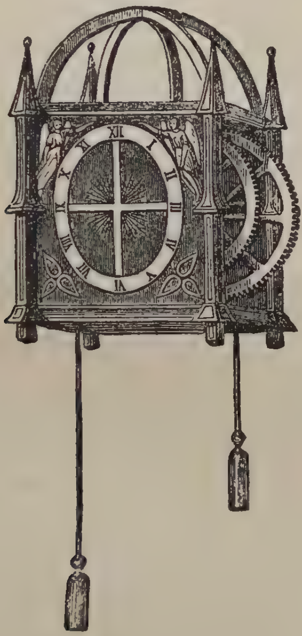
There was scarcely any form of decorative work that did not receive high artistic development at this time nearly everywhere throughout Europe. In recent years enamels have attracted much attention, and the recent presentation of the Barwell collection to the British Museum brought the Limoges work into prominence again. The London *Illustrated News* reproduced a series of Limoges enamels in the Barwell collection that are marvellous in color and artistic excellence.

The Courtois, the younger of whom, Jean, died in 1586, are probably the greatest artistic craftsmen in this mode. Pierre Courtois (or Courteys) made just about the end of our century the largest enamels which ever came out of Limoges with life-size figures of the Virtues. Pierre Reymond (Raymond or Rexmont), who was the Mayor of Limoges in 1567, did some work that attracted attention as early as 1532. The stream of artistic influence at this time can be studied very well in his work, for he was influenced by the Germans in his early maturity, later came under the influence of the Italian school, though he had been a pupil of Nardon Pénicaud, who himself came of a famous French family of fifteenth and sixteenth century artists, whose work always possesses distinction. Some of the plaques and salvers of this time in enamel are among the most precious treasures of national collections throughout the world.



SEATS (FIFTEENTH CENTURY MINIATURES)

Some of the locks and keys and latches and hinges for doors made during this period are among the most beautiful examples of iron work in the world. The Cluny Museum in Paris possesses a number of these as well as other iron work of Columbus' Century which show that the men of this time had the true artistic spirit in their work. The armorers of the period made probably the most beautiful armor that has ever been made, and the finest pieces in collections, especially in national armories, are nearly all from this time. Scent boxes and jewel boxes of various kinds in the precious or semi-precious metals were always executed with fine artistic taste, or at least some of the best examples of these in the world come from this time. Clocks were made with a perfection of mechanism and at the same time an ornateness that give them a place in the art world instead of merely in the industrial domain. The furniture of the time is noted for its artistic quality, and some of the smaller pieces made by well-known sculptors or under their direction were works of art that now are thought of as world treasures for all time.



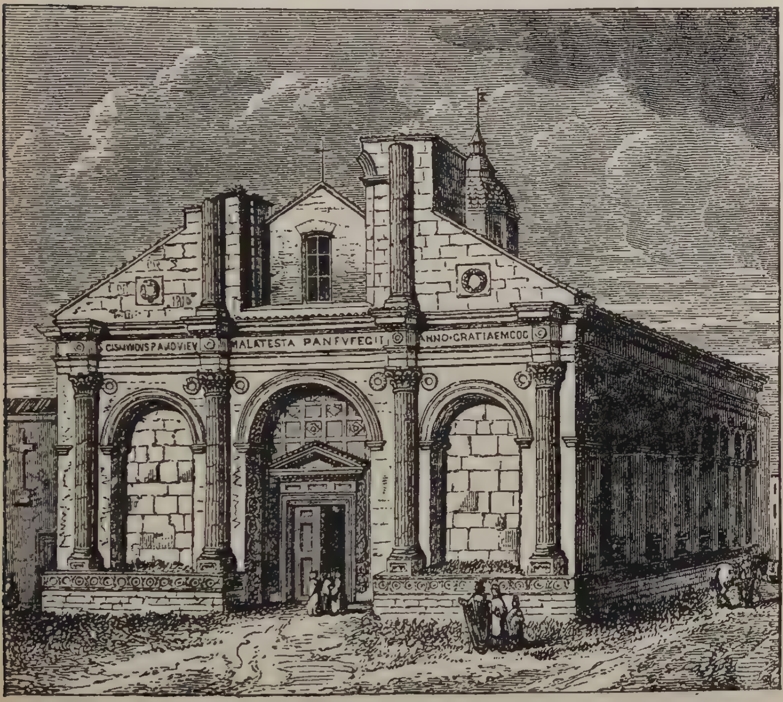
CLOCK (FIFTEENTH CENTURY, PARIS)

CHAPTER VIII

THE ARCHITECTURE OF THE CENTURY

Just as the introduction of Greek ideas gave a new impetus to literature and art and sculpture and painting, so it did also, and perhaps to an even greater degree, to architecture. The effect of classic thought had begun to be felt before 1450. It was noted first in ecclesiastical architecture and its influence can be traced throughout Europe. Brunelleschi, who built the great dome of the Cathedral in Florence, died in 1444, but not until he had shown the world of his time how beautiful such a conception was and how it could be accomplished. He had gone to Rome and studied the Pantheon, as well as all the other great buildings which the Romans had left in that city, and during his studies, becoming enamored of the subject, he mastered every detail of their style and became familiar with every form of Roman art. He first completed the Church of San Lorenzo in Florence and then was entrusted with a larger work, the completion of the Santo Spirito, which Arnolfo and Giotto had left unfinished and apparently, according to the practice of the Middle Ages, without even a drawing to show how they intended to complete it. They would have given it a Gothic roof. Brunelleschi conceived the dome and then, in the course of his studies and designing, definitely initiated the development of Renaissance architecture.

The first important influence in the architecture of our century is Leon Battista Alberti, who was led to the study of architecture because of his interest in classical literature and his desire to restore a classical style in building as well as in letters. In order to accomplish this, he wrote a text-book of architecture, "*De re ædificatoria.*" Besides the theory of classic architecture, he also devoted himself to its practical exemplification, and there are some models of his work that are well known. The charming little classic Church of San Francesco at Rimini and the much more important Church of San Andrea at Mantua were erected under his direction. The latter Church is noted, according to Fergusson in his "History of Modern Architecture," * for "the beauty of its proportions, the extreme elegance of every part and the appropriateness of the modes in which classical details are used without the least violence or straining." All the details of the classical architecture as applied to Churches are to be found in this in their simplest and most sincere form. They were to become so familiar afterwards as to represent a standard of Church architecture.



ALBERTI, SAN FRANCESCO (RIMINI)

The great development of this new style came under Bra-

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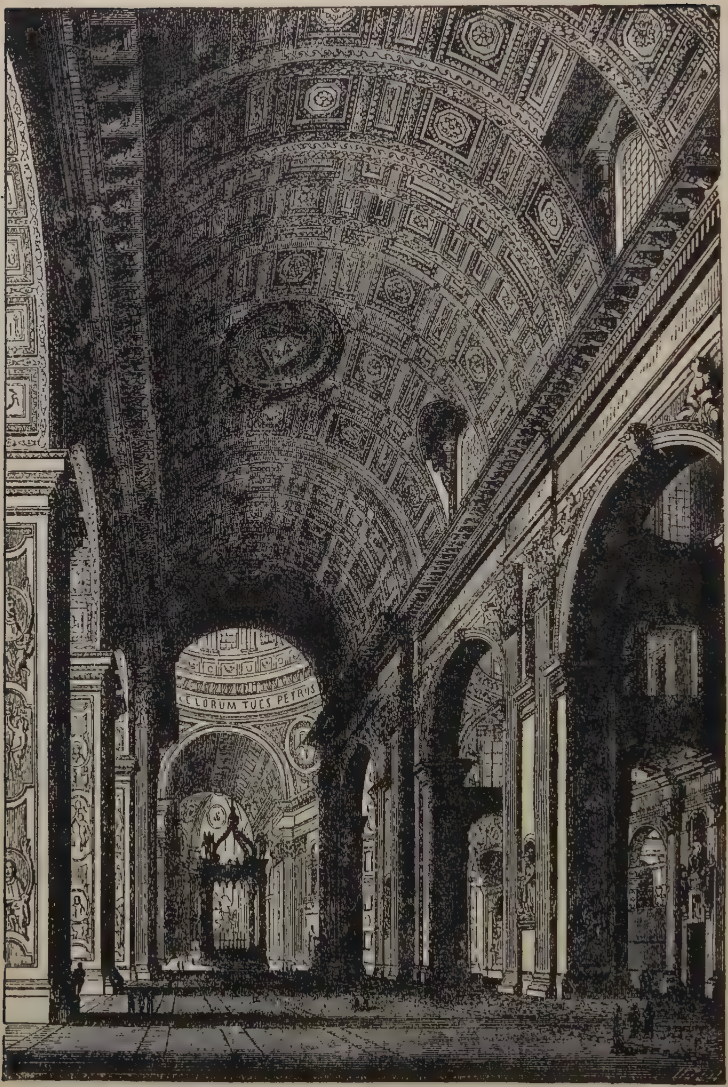
* Dodd, Mead & Co., 1899.



MICHELANGELO, ST. PETER'S (ROME)

mante of Urbino, who was born the year that Brunelleschi died. His most remarkable monument in ecclesiastical architecture is the Church at Lodi. Alberti's work had been mainly the restoration of the Basilican form. Bramante emphasized the domical or Byzantine type. After these two the change from the mediæval to the modern style of architecture may be said to have been completed and under the most favorable auspices. The dome of Santa Maria delle Grazie, which Fergusson pronounces " both externally and internally one of the most pleasing specimens of its class found anywhere," is another monument to Bramante's genius. Bramante is most famous, however, for his bold design and magnificent foundations for St. Peter's at Rome. He did not live to complete this, but had his original plan been carried out, the finished building would have been in many ways more satisfactory than it is and would have exhibited many less serious architectural faults.

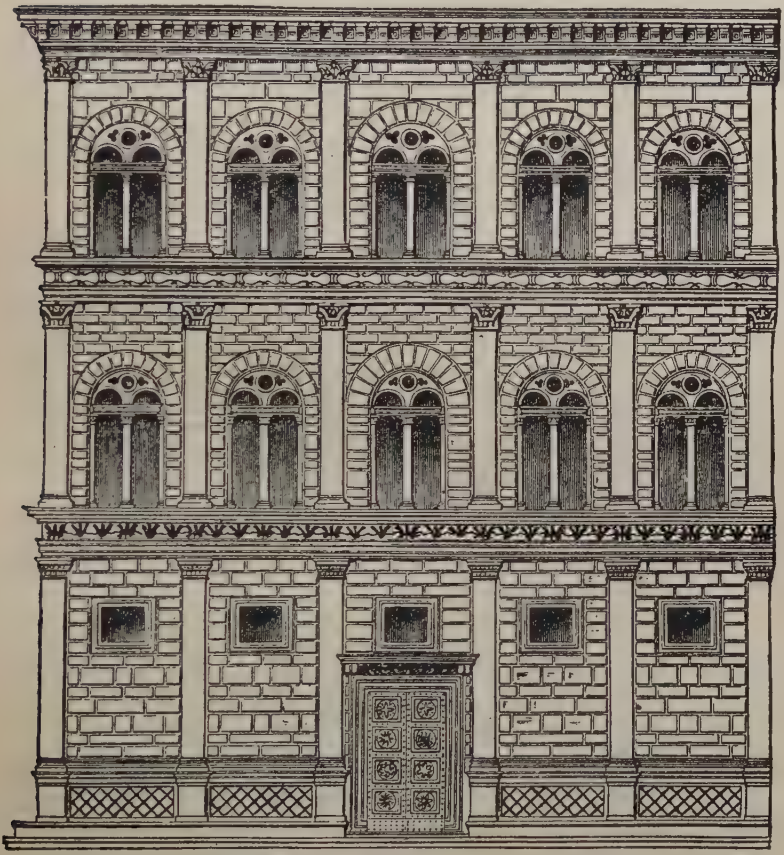
An excellent type of the ornate architecture of the Renaissance period is the façade of the famous Certosa near Pavia. The designs for it were prepared by Borgognone, a distinguished Milanese artist of that time, one of whose pictures will be found reproduced in the chapter on Secondary Italian Painters. He was much more essentially a painter than an architect, and this the Certosa demonstrates. Many an architect, with no ambition outside of his own department, would be eminently well pleased, however, to have succeeded in producing so beautiful and harmonious a design as may be seen in the façade of the great Church of the Italian Carthusians.

The architectural monument of the century is St. Peter's at Rome, designed originally by Bramante, whose design was developed and harmonized very beautifully by Sangallo, but only after Raphael had carried on Bramante's work for some six years and Baldassare Peruzzi had succeeded him for an equal term, though without accomplishing much. The defects so often noted come from this succession of architects. Sangallo's design has been preserved for us and shows what a magnificent conception he had. Michelangelo's dome might well have taken its place in this design without any of the overpowering effect that it has on the structure as completed. In spite of all the criticism that may be made of St. Peter's, because, as the editor of the recent edition of Fergusson's " History of Architecture " (Dodd, Mead & Co., 1899) says, " the big pulls away from the beautiful and there must be a compromise," it is one of the most wonderful of churches and one of the most marvellous structures that ever came from the hand of man. Fergusson himself is severe in criticism, and yet he says, "in spite of all its faults of detail, the interior of St. Peter's approaches more nearly to the sublime in architectural effect than any other which the hand of man has executed."

In England Renaissance architecture, that is the influence of the classical, had very little, indeed almost no effect during Columbus' Century. The genius, as well as the taste of the builders and architects of the time, however, is well illustrated by the development of Gothic architecture which took place in this period. The Italians of the Renaissance decided that the interior of buildings should be decorated by paintings. The English builders were yet in the period in which they considered that the interior decoration, just as the exterior decoration, should flow naturally from the construction of the building. These two styles are very well illustrated in two famous structures which were built within the same generation, though separated by half the width of the European continent, and which are triumphs of the respective styles of architecture. These are the Sistine Chapel at Rome and King's College Chapel of Cambridge, the plans of which, because of the inevitable contrast they suggest and the supreme effectiveness of both of them, deserve study. Each has a beauty of its own that advocates of either style cannot help but admire, and both give magnificent testimony to the power of the men of this time to express themselves nobly and beautifully in structural work under the influence of religious ideas.

In Spain the architecture of the time is noteworthy, though it is mainly of ecclesiastical character. All of the buildings erected by Ferdinand and Isabella are in the Gothic style, and the famous Church of St. John of the Kings at Toledo is as Gothic as the chapel of Henry VII at Westminster. The Cathedral at Salamanca commenced in 1513 and that of Segovia in 1525 are both thoroughly Gothic. These buildings are so well known that the accomplishment of this period in architecture need scarcely be emphasized. The first distinctively Renaissance work in Spain is the Cathedral at Granada, which, though Gothic in certain ways, contains Renaissance suggestions and modifications of form that have been adopted for many modern Churches.

The secular architecture of this period made as great progress as the ecclesiastical architecture, and it is of even greater interest because nearly all the ideas in common use among architects for monumental public buildings or ambitious private structures in our time are adopted and adapted from the architecture of Columbus' Century. As in ecclesiastical archi-

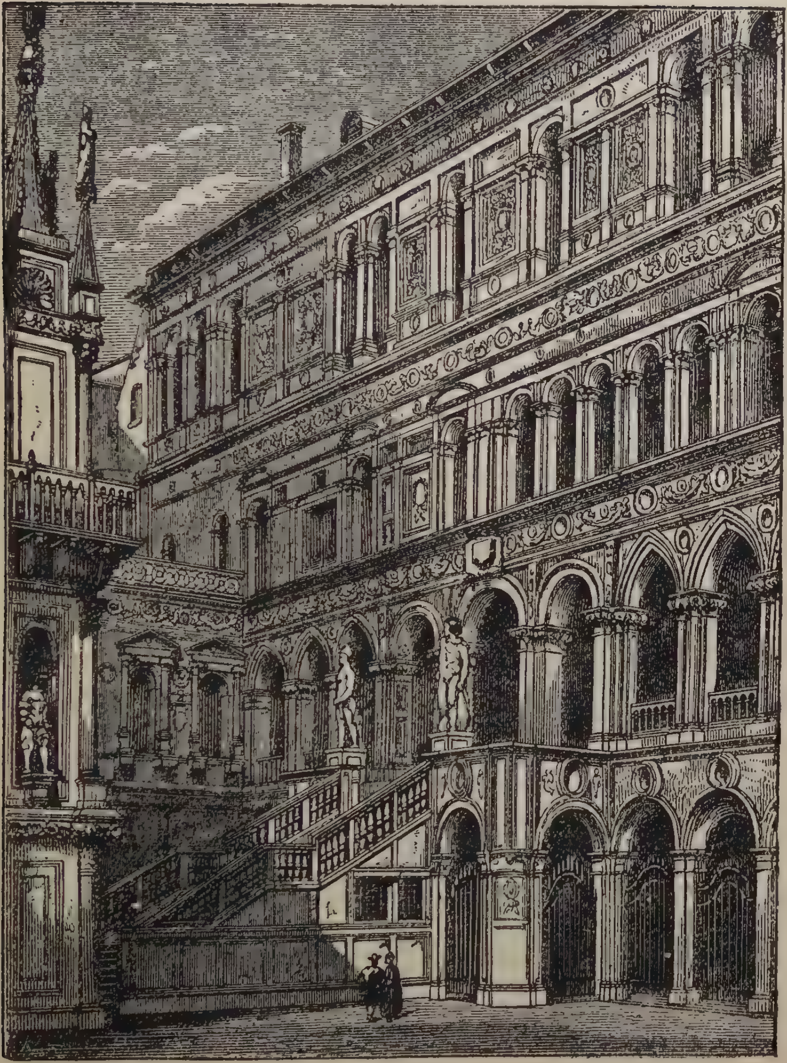


ALBERTI, RUCELLAI PALACE (FLORENCE)

tecture, the Renaissance begins in Florence. The erection of two of the magnificent palaces of the city, still well known and admired, the Riccardi, formerly called the Medicean, and the Pitti, were the initial steps. The Riccardi was designed by Michelozzi and has a splendid façade 500 feet in length and 90 feet in height. The Pitti is 490 feet in length, three stories high in the centre, each story 40 feet in height, with immense windows 24 feet apart from centre to centre. They show very well what the architects of this time could accomplish on this grand scale. Both were completed just about the beginning of Columbus' Century. After this, the Florentine buildings became more ornate, and yet with the ornament properly adapted to the structure and producing an effect of beauty that has deservedly won modern admiration and study. Probably the two most famous buildings of the first half of Columbus' Century are the Rucellai and the Guadagni palaces of Florence, the façades of which have been much admired. The Rucellai Palace was designed by Alberti, the Guadagni by Bramante. As their ideas dominated ecclesiastical architecture, so now they were to dominate secular architecture.

After Florence comes Venice, and here the wealth of the city, its Oriental affiliations and the light and air of its surroundings gave rise to a series of marvellously beautiful ornate Renaissance buildings, famous throughout the world and especially known to English-speaking people through Ruskin's "Stones of Venice." The most famous of these is the Palazzo Vendramini, which may be permitted to speak for itself. One of the most beautiful buildings in Venice is the Library of St. Mark, situated exactly opposite the Doge's Palace and built by Sansovino. Scarcely less beautiful is San Micheli's masterpiece, the Palace of the Grimani, which is now the post-office. These buildings are familiar to all. To know them is to admire them, and the architects of every progressive structural period since have devoted much study to them.

A very interesting development of Renaissance architecture took place in the little city of Vicenza, the birthplace of Palladio and the scene of some of his best work. Palladio was not so perfect in his achievements, as some of his admirers have suggested, but he applied most of the Renaissance ideas to



COURT DOGE'S PALACE (VENICE)

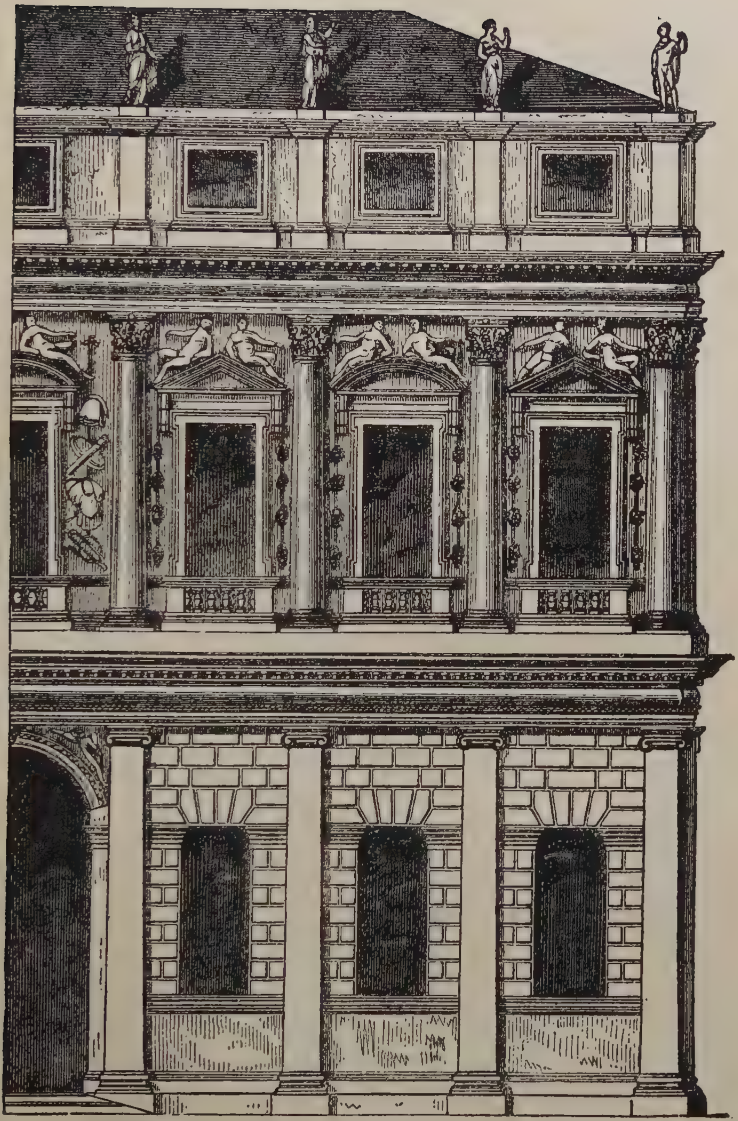
architecture very successfully, and his influence upon the after-time, as some of the illustrations which we have selected from his work will show, has been felt at all times and nearly everywhere. The Thiene Palace, which has been very much praised and is generally quoted as one of his most successful designs, has been criticized rather severely by Fergusson, and yet its effectiveness cannot be gainsaid.

The Chiericate Palace, another one of Palladio's designs reckoned among his best, has the objection that it is open and weak at the angles and solid in the centre and the centre is full above and weak below, and yet, after mentioning these faults, Fergusson says that there is "an exquisite proportion of parts which redeems this façade and an undefinable elegance of detail which disarms the critic of Palladio's work so that in spite of the worst possible arrangements they still leave a pleasing impression on the mind of the spectator." This is, perhaps, damning by faint praise, but it is praise indeed from Fergusson. Many others have been most enthusiastic about this and other of Palladio's works, and one has only to look around at our modern ambitious structures to realize how much of influence Palladio still has.

In Genoa there are some very beautiful buildings of this time, though as their material, despite the name "the city of palaces," was mainly rubble masonry covered with stucco, the windows without dressings, the intention being to paint the architectural mouldings on the stucco and also to paint frescoes between them, the unsatisfactoriness of much of the architecture for modern study can be realized. In spite of these limitations, Galeazzo Alessi (1500 to 1572) succeeded in making some very beautiful buildings. Probably the most admired example is the building now known as the Municipalata in the Strada Nuova, formerly known as the Tursi-Doria Palace.

Vignola (1507 to 1573) occupies the place in Rome that Palladio holds in Vicenza towards the end of Columbus' Century. A charming example of his construction is the Villa of Pope Julius near Rome, the façade of which is certainly his and which, without being ambitious, represents his power to express simplicity and dignity even in a summer house.

His great work is the Palace of Caprarola, built some thirty miles outside of Rome for the Cardinal Alessandro Farnese. The building is all the more interesting because it has furnished ideas for some of the larger public buildings of our time and contains more than a suggestion for some recent architectural

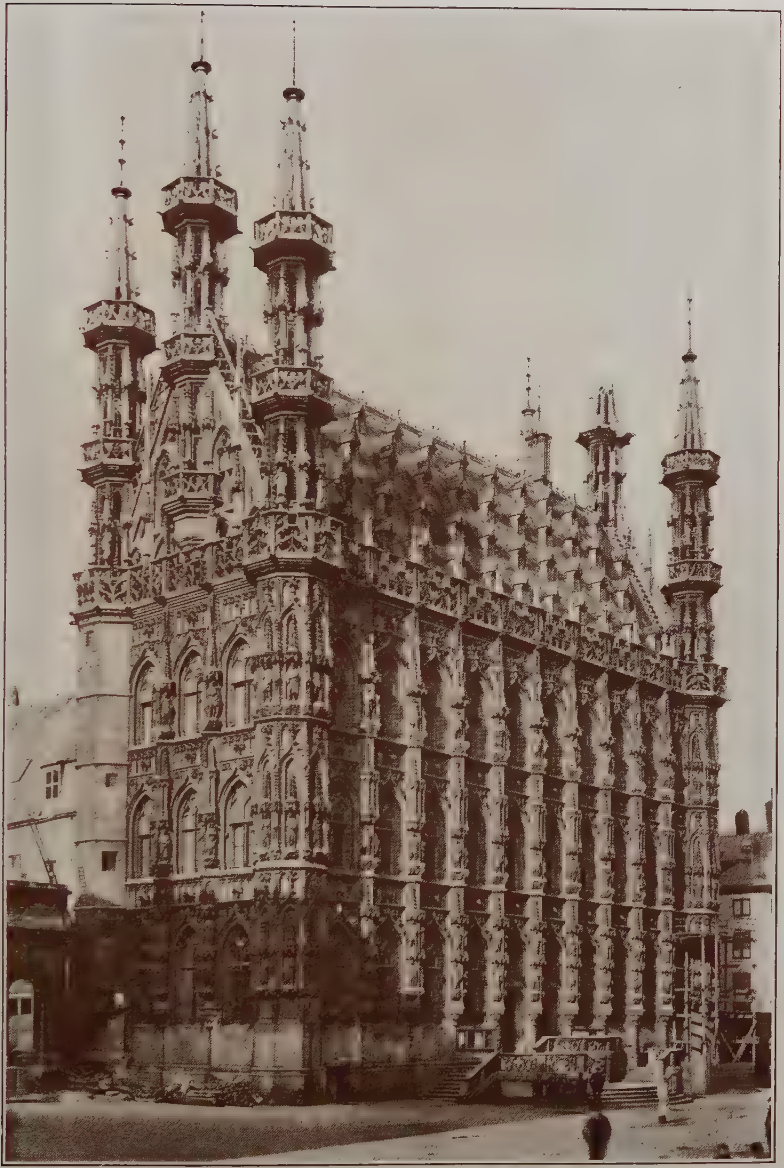


PALLADIO, BARBARANO PALACE (VICENZA)

plans of somewhat startling character for New York City. The plan of the Palace of Caprarola is a pentagon enclosing a circular court, each of the five sides measures 130 feet and the court is 65 feet in diameter, while the three stories are each about 30 feet in height. It is usually considered one of the finest palaces in Italy. In spite of the difficulty of the task and the singularly unfavorable nature of pentagonal form for architectural effect externally and commodious arrangements internally, the architect succeeded admirably. As the picture of it shows very well, the approach was managed beautifully and the effect of castellation very well secured.

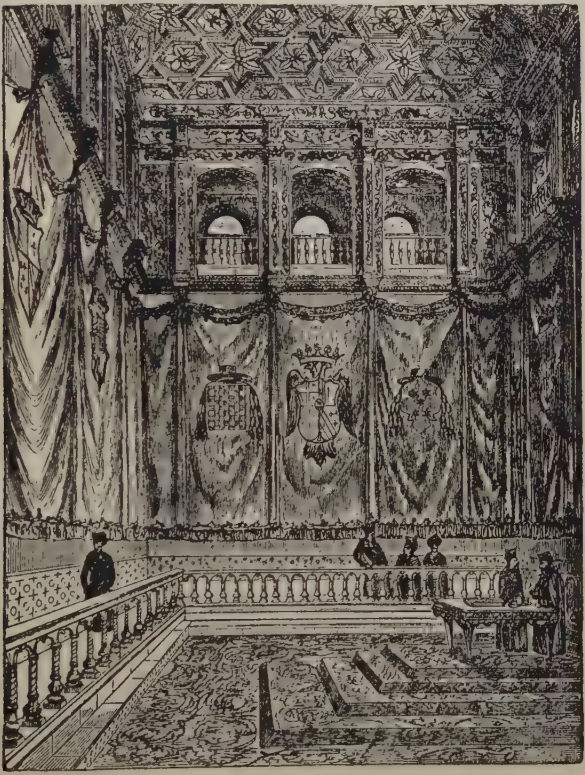
The story of architecture, secular as well as religious, outside of Italy is quite as interesting as that in Italy itself at this time. Everywhere throughout Europe beautiful buildings were erected in charming taste and with fine effectiveness. This is particularly true as regards the municipal buildings of various kinds, the town halls, the hospitals, the asylums for foundling children, and all the other structures due to civic munificence at this time. Just as in regard to painting and sculpture, the Netherlands was the seat of some extremely beautiful artistic work of great originality and perfection of detail during this period. There is scarcely an important town of Belgium, and even a number of those that have become quite unimportant in our time, which does not present some architectural monument of cardinal importance in the history of architecture. While Italy is much better known, Belgium deserves, and in recent years has very properly received, devoted attention from students and amateurs in all the arts, and not least has its architecture come into its due meed of praise and appreciation.

One of the most beautiful architectural monuments of the later fifteenth century is the town hall of Louvain. Indeed, it is one of the most beautiful architectural monuments of its kind in the world. Schayes, in his "History of Architecture," says, "Not only is the Hôtel de Ville of Louvain the most remarkable municipal edifice in Belgium, but one may seek in vain its equal in Europe." Its architect, whose name was unknown until well on in the nineteenth century, was only a master mason of this capital of Brabant when he was entrusted



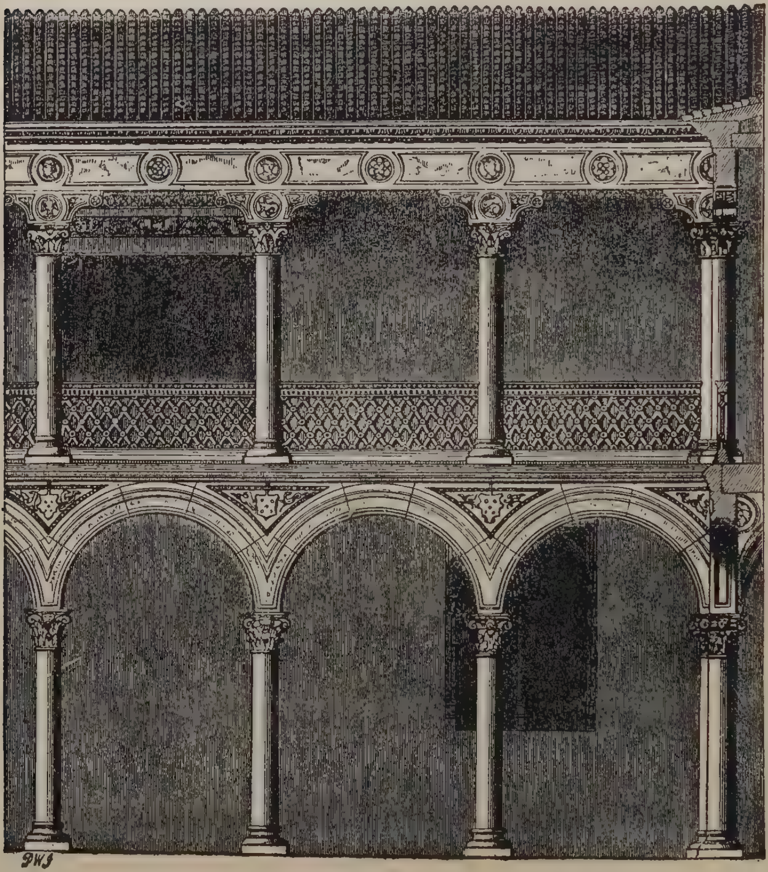
HOTEL DE VILLE, LOUVAIN

with the task of making for the burghers of one of the most important towns of the time a town hall such as they would consider worthy of them, but above all surpassing those erected by any of the neighboring towns. He succeeded eminently in fulfilling the commission, and fortunately the town hall remains almost in its original condition as a monument to the wonderful artistic workmanship of the time.



ALCALÁ, PARANIMFO (STATE APARTMENT OF UNIVERSITY)

George Wharton James, in his book on " Some Old Flemish Towns," says, " The exquisite Hôtel de Ville reminds one of the caskets or reliquaries which Kings and Queens used to give to be placed upon the high altars of Cathedrals. There is the same simplicity of design, the same beauty of line, the rectangle with gables, emphasized by a graceful tower at each pinnacle, and another at each angle, the whole finished with a crown spire tipped with a golden flèche." The decorations are most delicate, reminding one of the lace work of the country,



ALCALÁ, ARCHIEPISCOPAL PALACE COURT

but it seems almost incredible that this effect should have been produced so marvellously in stone. In spite of the multitude of decorations, the structure does not strike one, as do so many of the buildings of the seventeenth century, as over-decorated, but somehow all the charming sculptured ornament seems as suitably in place here as it is in the exquisite patterns of the lace of the town.

The beautiful Hôtel de Ville of Brussels is almost as interesting as that at Louvain and represents the early part of the Columbus' Century. At the opposite side of the Grande Place is what is now known as the Maison du Roi, formerly known as the Broodhuis or House of Bread, which is scarcely less interesting, though very much restored, than the Hôtel de Ville. The one is a monument of the Gothic of the middle of the fifteenth century, the other shows the influence of the Renaissance in the early sixteenth century. The whole of the Grand Place gives an excellent idea of the devotion of these municipalities to civic beauty and monumental construction and represents an anticipation of ideas that are usually considered modern but that were very thoroughly developed and applied in making the "City Beautiful" in Columbus' Century. Were there space, much might be said here about the magnificent town halls of Bruges, Ghent and other cities of the Netherlands.

The architecture of Spain, practically always connected with the names of ecclesiastics and usually built for ecclesiastical or educational or charitable purposes, shows very well the profound intellectual genius of the people for whom Columbus' discovery was made and who were beginning to reap the material benefits of his extension of the Spanish realms in the Western continent. One of the most important of the buildings of the time is that of the University of Alcalá, under the direction of the celebrated Cardinal Ximenes, or Cisneros. The rebuilding commenced about 1510 and continued nearly to the end of Columbus' Century. It is an extremely beautiful building. The Archiepiscopal Palace is quite equal to it, and its court has been very highly praised. Fergusson has spoken highly of the bracket capitals in the upper story of this court, of which we give a sketch, and he thinks this invention of the Spanish architect a distinctly new and valuable idea in architecture which unfortunately has not been commonly adopted.

Some of the internal arrangements have been very much admired, and the Paranimfo, a state apartment in the University, deserves attention not only for its intrinsic beauty, but from its being so essentially Spanish in style. The roof is of richly-carved woodwork in panels in a style borrowed from the Moors. Fergusson says that there is another and more beautiful specimen of this sort of work in the chapel of the University above the Cenotaph of the great Cardinal.

CLOISTER, (LUPIANA, SPAIN)

Elsewhere in Spain some of these beautiful courts and interiors were ornamented very highly as became a Southern people, and yet with an effectiveness and taste that have caused them to be very much admired in after-times. In the Monastery of Lupiana there is a cloistered court similar in design to that at Alcalá, but even grander, four stories in height, each gallery being lighter than the one below it and so arranged as to give the appearance of sufficient strength, combined with the lightness and elegance peculiarly appropriate to domestic architecture, especially when employed internally as it is here. Fergusson, from whom the opinion just expressed is quoted, thinks that the Spanish architects were far more happy than their Italian brethren in this regard and mainly because they borrowed ideas from their own Spanish art rather than kept too insistently to classic ideas.

Two royal buildings in Spain, the Palace of Charles V at Granada and the Alcazar of Toledo, deserve to be mentioned. The Alcazar was begun before the end of Columbus' Century, but not finished until later. The sketch of it here presented gives an excellent idea of how simple and yet properly ornate for monumental purposes the Spanish architects were making their buildings at this time. The truly Spanish features of solidity below, with the increasing richness and openness above, is very effective and is all the more interesting because historians of architecture declare that this effect was little understood outside of the Spanish peninsula.

The upper portion of the famous tower of the Giralda at Seville, which has always attracted so much attention for its beauty, was being built just at the close of the century. We in modern America have given it the tribute of sincerest flattery by imitating it in the tower of Madison Square Garden. It is interesting to realize that the Spaniards put a figure of Faith at the summit of the beautiful tower, pointing strikingly heavenward. Is it significant that we in our time have found nothing better to put there than the outworn symbol of a statue to Diana?

French secular architecture at this time made some fine achievements which are very well known and have been very much admired. The Louvre in Paris is a succession of monuments to the architectural spirit of the French for centuries. I think that there is very general agreement that the portion of this building erected in Columbus' Century is not only the most interesting, but the most beautiful. The Pavillon de l'Horloge is quite charming in its effectiveness. The ornamental portions are said to have been sculptured from designs furnished by Jean Goujon. This is enough of itself to make us sure that they would be beautiful, but they were besides very artistically designed to heighten the effect of the architecture.

ALCAZAR (TOLEDO, EXTERNAL FAÇADE)

The best-known contributions to architecture by the French in this time are their famous châteaux. The typical example of these is the Château of Chambord, commenced by Francis I immediately after his return from his Spanish captivity. While the design is classical in detail, it is eminently French in character, and it has been a favorite study of architects ever since. Its repute shows how well architects at this time accomplished their purpose of making an impressively beautiful building. At this same time the Château of Madrid, situated in the Bois de Boulogne at Paris and which was unfortunately destroyed during the Revolution, was built, and the sketches that are left to us show us its beauty and effectiveness secured through comparative simplicity. All the famous châteaux of France were either built or received their most famous additions under the influence of the new spirit that came into architecture under the influence of Francis I. Those of Bury and Blois and Amboise and Chenonceaux were products of this period. The staircase and the wing in the centre of which it stands at Blois are among the most admired, or at least the most frequently drawn, of the works of this age.

All the other departments of architecture, besides the ecclesiastical and municipal, were affected by the enterprising spirit which entered into architecture at this time. Leonardo da Vinci offered to build fortifications under any and all circumstances, the more difficult the better, and succeeded in doing some excellent work. According to tradition he laid firm foundations, even under water, for certain French fortifications, and these still remain. In bridge building particularly this period did some excellent work. In the chapter on Social Work and Workers will be found an illustration of the bridge built across the Avon at Stratford by Sir Hugh Clopton about the time of the discovery of America, which shows that they could build beautifully as well as enduringly at this time. There are many private houses in the towns of Europe erected at this time, some of them even by families without any pretension to wealth or nobility, which illustrate very well how sincere and thorough was their domestic architecture, how beautiful because of its honest straightforwardness and how eminently enduring. Fra Giocondo, who edited the Aldine edition of Vitruvius in 1511 and who edited Cæsar in 1513, introduced illustrations into these works, and particularly a plan of Cæsar's bridge across the Rhine. He used his classical knowledge to good purpose, however, for in the service of the king of France he probably built two of the noble bridges that still span the Seine. These were finished early in the sixteenth century. It would not be difficult to note other examples of this same kind in many parts of Europe at this time.

Fergusson summed up the place of this century in architecture very well in his advice to Italy as to what must be done in order to restore to that country the precedence that she won in architecture in the fourteenth and fifteenth centuries. He said (p. 169): "Italy has only to go back to the inspirations which characterize the end of the fifteenth and the dawn of the sixteenth century, to base upon them a style which will be as beautiful as it would be appropriate to her wants and her climate. If she will only attempt to revive the traditions of the great age which is hallowed by the memories of Leonardo da Vinci and Raphael, of Bramante, Sangallo, and even of Michelangelo, she cannot go wrong. These men erred occasionally from inexperience, and because the system under which the art was conducted in their days was such as to render success impossible; but their aspirations were right, and there was an impress of nobleness on their works *which has not since been surpassed.*

"Since their time the history of Italian art may be summed up in a few words. During the fifteenth century it was original, appropriate and grand; during the sixteenth it became correct and elegant, though too often also tinctured with pedantry; and in the seventeenth it broke out into caprice and affectation, till it became as bizarre as it was tasteless. During the eighteenth it sank down to a uniform level of timid mediocrity, as devoid of life as it is of art."

It is as true for all the countries of Europe as for Italy that what is needed for the redemption of architecture from the unfortunate sordid influences which have crept over it is a return to the ideas of Columbus' Century. Fortunately, since Fergusson wrote his paragraph of advice for Italy, a great change has come over the attitude of men generally toward architecture, and beautiful buildings are being erected nearly everywhere, most of them with Renaissance ideas prominent in them, but above all with the lessons drawn from this fruitful period of beautiful construction guiding the minds and hands of architects and builders. All around us handsome Renaissance buildings are rising. Inasmuch as they are mere imitations, they are unfortunate evidence of our lack of originality. If, somehow, using the same high standards of taste and the inspiration of the classic authors as did the men of Columbus' Century, we can succeed in evolving an architecture suited to our conditions and our environment and appropriate for the uses of our day, then we shall accomplish the solution of the problem which they solved so well. What they did above all was to accomplish in building Horace's dictum that "he who mingles the useful and the beautiful takes every point." The merely useful is hideous. The merely beautiful is monstrous. Success lies in that combination of use and beauty, of which Columbus' contemporaries so ingeniously found the key.

CHAPTER IX

MUSIC

Everyone concedes the supreme accomplishment of Italy in the arts of painting, sculpture, architecture, and even in the lesser arts and crafts during the Renaissance period, which we have called Columbus' Century. It is not always realized, however, that her place in music is almost equally important and that her accomplishment in this art came also during this same period. While musical development into modern forms came as a rule after the close of our century, the great foundations of modern music were laid at this time. These are not so deep beneath the surface of developed music, however, as to be hidden from us entirely at the present time. On the contrary, there are many composers and musical measures of this period which still have an interest quite apart from their antiquity and which music-lovers know very well in spite of the time that has elapsed since their composition.

We know nothing of ancient music, and indeed are scarcely able to conceive just how Grecian music was composed or written and expressed. It might be thought, then, that the Renaissance, representing the influence upon the modern world of the rebirth of Greek ideas, would be lacking in any important development of music. In every other department, even in that of science, indeed it might well be said, especially in that of science, the influence of contact with ancient Greek ideas can be readily seen. They formed the stimulus for study and often supplied the fundamental information on which modern, that is Renaissance, developments were built up. Without this aid from the ancients, then, it might reasonably be expected that music would be neglected or would certainly be in abeyance, but this is not the case. There is a great period of musical history, not perhaps so significant as the progress in other departments of æsthetics, but containing within itself a magnificent achievement and the germ of all our modern music.

Perhaps there is nothing that demonstrates so well the fact that the Renaissance was not, as it is so often considered, a rebirth out of nothingness after some 1500 years of darkness and lack of accomplishment than the history of music. Only that there had been a great period of advance in Europe before the Renaissance, the stimulus of Greek would have had very little effect. The old philosophers said that things are received according to the capacity of the receiver, and in the modern time a favorite maxim of teachers is that students take away from a lecture what is of value to them just in proportion to what they brought to it. It was the height of the culture of the preceding period that enabled the generations of the Renaissance to take such good advantage of the New Learning. In music, there being no New Learning, they had to depend on their own efforts, and the magnificent fruits of their musical progress show how the genius of the time was capable of accomplishment for itself.

As a result of the lack of any stimulus from Greek sources for music, the first development of it at this time is noted not in Italy, as is true for other modes of æsthetic evolution because of contiguity to Greece, but, on the contrary, in the distant West of Europe and especially in the Netherlands. Henderson, in his " The Story of Music," declares that " all the countries at this time took Netherlandish masters," and one finds the names of distinguished teachers of music, who were from the Low Countries, in centres so far apart as Naples, Venice, Munich and Madrid.

The first of these, who was an extremely important factor in the music of the time, was Ockeghem, or Ockenheim, of Hainault, who, in the latter half of the fifteenth century, came to be looked upon as probably the greatest teacher of the time. He is surpassed in fame by his pupil, Josse Despres, usually known by the name, familiarly used among his friends, Josquin, who is also a native of Hainault. Henderson declares that " in technical skill no master has ever surpassed Ockeghem; and all that he knew he taught Josquin, who made it the outlet for his real musical genius." Luther said of him, " They sing only Josquin in Italy; Josquin alone in France; only Josquin in Germany; in Flanders, in Hungary, in Bohemia, in Spain, it is always only Josquin." From this testimony, and the otherwise well-known popularity of this composer's music, it is probable that there has never been a great European musician who, in his own time, has gained more universal acclaim among music-lovers than Josquin.

There is no doubt at all of the merit of his work. Arcadelt, who was Palestrina's teacher at Rome and himself a distinguished musician of this time, said of him: "Other composers make their music where their notes take them, but Josquin takes his music where he wills." Arcadelt's musical ability is recognized; an Ave Maria by him is still often sung.

Other countries were not without an important development in music at this time. England had been the leader in musical composition and evolution before Flanders had her turn. In the thirteenth and fourteenth centuries England had developed part singing and also laid the foundations of counterpoint. In the fifteenth century musical composition and erudition came to be considered of so much importance that academic honors were conferred on musicians. John Hamboys, the author of some treatises on the art of music, is said to be the first on whom the degree of Doctor of Music was ever conferred. In 1463, according to the records, the University of Cambridge conferred the degree of Doctor of Music on Thomas Seynt Just and the degree of Bachelor of Music on Henry Habyngton. During the following century it was required that candidates for the degree of Musical Doctor should present an original musical composition. America has followed England in the granting of academic degrees for music, though I believe no other country has done so except Ireland.

In the latter half of Columbus' Century there was a vigorous native school of music in Germany which devoted itself, however, almost entirely to the composition of songs for the people. The best known of the composers of this time is the famous Hans Sachs of Nuremberg, who, in the first half of the sixteenth century, wrote so many ballads for the people and set them to his own music. He was by trade a shoemaker, and all the musical composers in this particular mode seem to have been craftsmen who took to musical composition and the writing of ballads for their music as a recreation after their daily labor. They organized themselves into guilds, which, in imitation of the old knightly songsters of the days of chivalry, they called Meistersingers. In its vigorous originality this movement produced at the beginning some striking folk music with a wonderful influence on the life of the people. After a time, however, the spirit of exclusiveness asserted itself and seriously hurt their work. They enacted rigid and pedantic laws, refused to admit to mastership in the guild those who did not follow these laws, and the letter killed the spirit, and true music disappeared, while men who prided themselves on their musical ability and taste were trying to uplift it, but were really regulating it out of existence. The decline in music is, however, only commensurate with the decline in the other arts and due to many of the same causes.

The latter half of Columbus' Century saw the rise of the great Roman school of music which, at the end of this period, was to bring about a culmination of musical achievements that places this among the greatest musical epochs of the world. As was true everywhere in Italy, Rome owed its musical incentive and teaching to a Fleming. The great master was Claude Goudimel, who is said to have been born at Avignon, but who was educated in Flanders and is known as a Fleming. Among his pupils at Rome, where he opened a school, are the most famous musicians of the sixteenth century and some of the most famous of all time. Among others, probably, were Palestrina, the supreme master of modern church music, though the old tradition of Goudimel's great influence over him is now denied; the brothers Animuccia, one of whom was the penitent and intimate friend of St. Philip Neri, the founder of the Oratory, after which the Oratorio is named, and the brothers Nanini, who contributed so much to Italian music before the end of the sixteenth century. Another of his pupils was Orlando di Lasso, known as Lassus or Latres of Mons, who was one of the greatest and most popular of the musicians of this time. He was known in many countries and popular in all of them. To him we owe the definite attempt to make words and music run along in such harmony as would emphasize and thoroughly co-ordinate the meaning of both. An abuse had been growing for a considerable period by which prolix florid passages of music were written for single syllables. Even Josquin had indulged much in this vicious mode. After Orlando di Lasso's reformation, the practice was to come back again in the fiorituri of the opera composers, especially the Italians of the early nineteenth century, and had to be combated by Wagner. There is little in the revolution effected in music by the modern German composer in this regard at least that was not anticipated by his great predecessor, Orlando, full three centuries before. Orlando di Lasso was known, moreover, for the sweetness, beauty, as well as the great number and variety of his works. One of his songs, "Matona! Lovely Maiden!" has been pronounced one of the most charming part songs in existence.

Lassus (di Lasso) tried every form of music at this time, but devoted himself chiefly to musical compositions for church purposes. We have from him psalms, hymns, litanies, magnificats, motets, as well as more lengthy musical settings for religious services. Bonavia Hunt, the Warden of Trinity College, London, and lecturer on musical history, in his "History of Music" declares that Lassus' settings of the Seven Penitential Psalms for five voices are among his best works. They contain elements that have made them a favorite study for students of music even in our time. Lassus introduced such musical terms as *Allegro* and *Adagio* into music and brought chromatic elements into musical composition. He was very greatly appreciated in his own day and was called *Princeps Musicæ*, the prince of music. He received as much honor from statesmen as Palestrina did from churchmen, and the story of the honor paid to both of them by their own generation is the best possible tribute to the musical taste of the time. Lassus was made a Knight of the Order of the Golden Spur.

The greatest musician of this time, however, probably indeed the greatest of all times, is Palestrina, who in 1551 was appointed the musical director of the Julian Chapel in the Vatican with the definite hope that he would reform the evils that had crept into music and were making the art in its most recent development so unsuitable for religious purposes. The Council of Trent, whose sessions were being held with interruptions at this time, had to legislate so as to secure suitable music for the mass. Ornamental passages of all kinds, or at least what were supposed to be such, had been introduced into church music, until finally it was quite impossible to follow the words of the service. As Cardinal Borromeo said, " These singers counted for their principal glory that when one says *Sanctus* another says *Sabaoth* and a third *gloria tua* and the whole effect of the music is little more than a confused whirling and snarling, more resembling the performance of cats in January than the beautiful flowers of May." He was one of the committee who insisted at various sessions of the Council of Trent on musical reform, and while their work has sometimes been falsely represented as derogatory of music itself, all that the Council wished to accomplish was to secure intelligibility of the words, and as a matter of fact their insistence on the simplification of music led to a magnificent new development in the art.

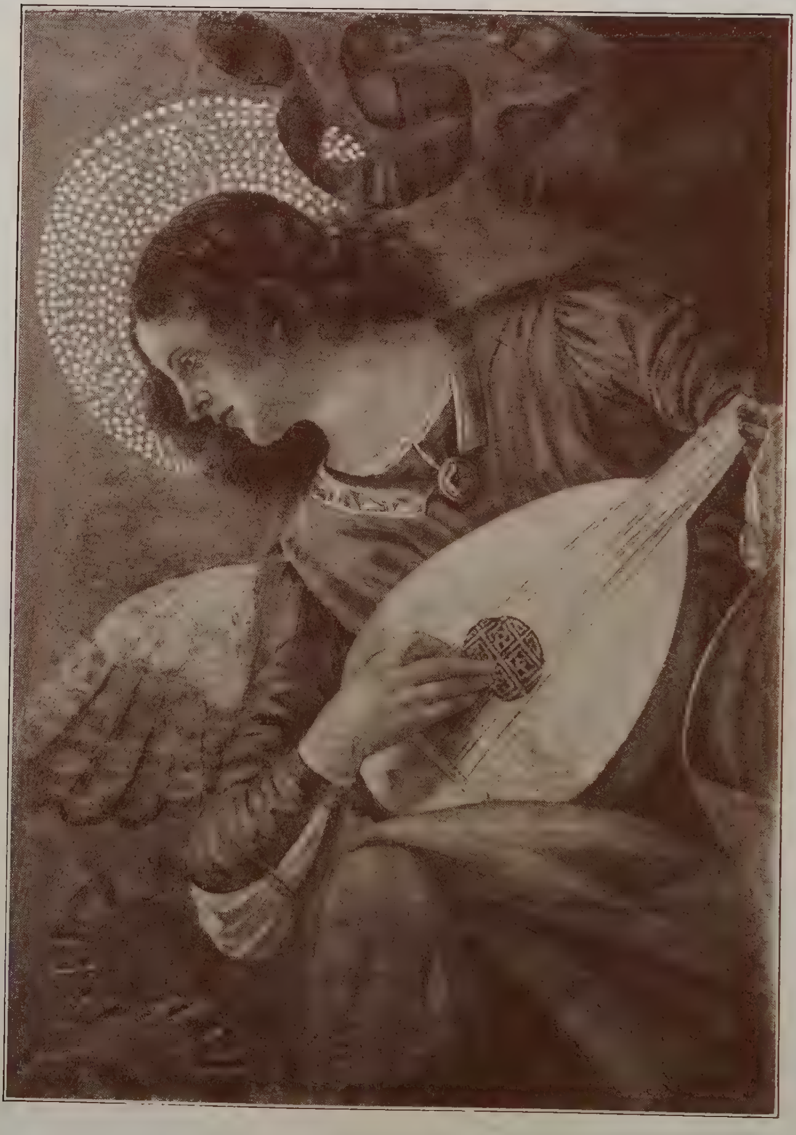
It has sometimes been said that Palestrina's work represented a revolution in the music of his time. This is not true, however, for his great mass music was only an evolution in the hands of the great master of the musical movement that had preceded his time. The story of his having been asked to write music very different from that which had immediately preceded, in order that church music might be preserved and figured music be thus still used in ecclesiastical services, has been discredited by recent historical research. At the end of Columbus' Century a climax in musical expression had been reached which Palestrina represents and which marked an epoch in the history of music. The abuses that had crept in were quite apart from the genuine evolution of music. Henderson, in his " How Music Developed " (New York: Stokes, 1898, page 73), has told the story:

"The mass of Marcellus was not written to order, and there was nothing new in its style. The mass is simply a model of all that was best in Palestrina's day. It embodied all that was noblest in the polyphonic style developed by the Netherlands school. Its melody is pure, sweet and fluent, and its expressive capacity perfectly adapted to the devotional spirit of the text. Palestrina's contemporaries, such as Lasso and some of his predecessors, wrote in the same style. Lasso's 'Penitential Psalms' are much simpler in style than this mass. Its apparent simplicity lies in the fact that its profound mastery of technical resources conceals its superb art. The polyphonic writing is matchless in its evenness; every part is as good as every other part. The harmonies are beautiful, yet there is apparently no direct attempt to produce them. They seem just to happen. But above all other qualities stands the innate power of expression in this music. It is, as Ambrose has hinted, as if the composer had brought the angelic host to earth."

Mees, in his "Choirs and Choral Music," has outlined what the place of Palestrina's music in church services is, and made it very clear how helpful it is for devotion instead of suggesting distractions, as modern music is so sure to do. Dickenson, in his "Study of the History of Music," says that in "Comparing a mass by Palestrina with one of Schubert or Gounod he (the hearer) will perceive not only a difference of style and form, but also one of purpose and ideal. The modern work strives to depict the moods suggested by the words according to the general methods that prevail in modern lyric and dramatic music; while the aim of the older music is to render a universal sentiment of devotion that is impersonal and general. Music here conforms to the idea of prayer. There is no thought of definite portrayal; the music strives merely to deepen the mystical impression of the ceremony as a whole."

Mees had said in his work, p. 61:

"Palestrina's conception of what the music of the Roman church should be was in perfect accord with the principle held by the early church: that music should form an integral part of the liturgy and add to its impressiveness. . . . No sensuous melodies, no dissonant tension-creating harmonies, no abrupt rhythms distract the thoughts and excite the sensibilities. Chains of consonant chords growing out of the combination of smoothly-flowing, closely-interwoven parts, the contours of which are all but lost in the maze of tones, lull the mind into that state of submission to indefinite impressions which makes



MELOZZO DA FORLI, ANGEL WITH LUTE (ROME) it susceptible to the mystic influence of the ceremonial and turns it away from worldly things."

Perhaps the best proof of the enduring value of Palestrina's work is to be found in the fact that some of his compositions are still to be heard in the Sistine Chapel, and that even in our own time * a definite movement to restore his music to its proper high place in the service of the Church has been initiated. Whenever, since his death, music has been really on a high plane, Palestrina has been thoroughly appreciated. Whenever musical taste has been debased and men have gone seeking after novelty and bizarre effects and over-decoration, Palestrina has been neglected. For music, he is what Dante is to literature and art, the touchstone by which it is easiest to estimate properly the value of a generation's critical faculty and spirit of appreciation. Henderson, in his "How Music Developed," already quoted from, has summed up Palestrina's accomplishment in a few words:

"Before leaving the subject of Palestrina, let me endeavor to make clear to the reader wherein his style is so fine. Composers before him had begun to aim at the simplification of church music. They sought to accomplish their purpose by breaking the shackles of canonic law. The canon had demanded the most exact imitation in the different voice parts. The new style allowed the greatest freedom. The result was that free polyphony took the place of rigid canon. Conse-

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*The decree of Pope Pius X, requiring the restoration of the Gregorian Chant to the place of honor in the Liturgic Services and making Palestrina's music the standard to which choir music should properly conform, seemed to many music-lovers distinctly reactionary and perhaps old-fogyish. As a matter of fact, it was a well-judged restoration of such criteria in church music as would preclude the possibility of modern unsuitable developments of music finding their way further into church services. It was open to the same objections on the part of those who knew no better as the decree of Pope Leo XIII that St. Thomas Aquinas' Philosophy should be the standard in Catholic schools of Philosophy and Theology. The two decrees will be set beside each other in history as examples of the ability of great Popes so to direct church policy as to preserve the faithful from human degeneracies of taste and thought. Palestrina's music is as firm a standard of church music as Aquinas' thought is a safe criterion in philosophy.

quently composers were able to devote more attention to the development of fluent, beautiful and expressive melody. The merit of Palestrina's work was that it carried this style to perfection. His compositions became the models for succeeding composers, and indeed they remain to this day unequalled as examples of pure church music."

Palestrina's career furnishes another striking example of the opportunities for genius to express itself provided by this period. According to a contemporary manuscript authority, so that the story is probably much more authentic than such stories usually are, young Pierluigi of Palestrina, the ancient Præneste, while peddling in the streets of Rome the products of his father's farm, used to sing songs, one of which was heard by the choirmaster of Santa Maria Maggiore. He found that the boy had not only a beautiful voice, but a taste for music, so he gave him the opportunity for a musical education. Palestrina lived to be over eighty years of age, with manifold opportunities afforded him for the display of his genius. The latter half of his life was spent as one of the most honored men of his generation. His most brilliant period began when he was nearly seventy and when he was apparently thinking his career at an end. His complete works in thirty-three volumes have just been published, the last volume of the completed edition being presented to Pius X in 1908, who was most interested in this great modern monument to the Catholic genius of music. The great composer is worthy to stand beside St. Teresa, St. Philip Neri and St. Ignatius Loyola as one of the protagonists of the counter reformation. He did for music and the Church what others did for education, mysticism and social reform.

One of the most interesting chapters in the history of music began just about the end of Columbus' Century. St. Philip Neri, of whom we have spoken in the chapter on Social Work and Workers of the period, was himself devoted to music and recognized how much it might mean for occupation of mind with higher things that would be a source at once of pleasure and social relaxation. He appreciated also how much of value music might lend to the proper expression of religious feeling, and even how much it might add to genuine religious sentiment. The Miracle Plays of the latter half of the fifteenth century had always been accompanied by certain songs and glees with words relating to the sacred subjects often set to popular music. St. Philip recognized that these performances might be raised to a higher plane by introducing more music and using the best possible music for their illustration. Accordingly, in the course of services held in his oratory, he introduced historical scenes and sacred allegories with a musical setting, calling as a rule on his musical friends in Rome, and especially Animuccia, to supply him with compositions. Hence the term oratorio, the Italian word for oratory, for this class of music. It was not to reach its highest form of expression, the dramatic, until the end of the sixteenth century, but it is an invention of Columbus' period.

An extremely important invention of this time was the introduction of the chord of the dominant seventh. The discovery is usually said to have been due to Claudio Monteverde of the seventeenth century, but the earliest extant musical works, in which examples of the phenomenal chord of the dominant seventh with the full freedom of present-day practice are found, are those of Jean Mouton of Holling in Lorraine, who died about 1522. For nearly a century after this time this great discovery, like so many others in every department of science, struggled for a place. It was finally acknowledged. This discovery brought music into close relation with science, and demonstrated its foundation in the natural laws of acoustics. In his article on the History of Music in "The Encyclopædia Britannica," Sir George A. MacFarren, Professor of Music at the University of Cambridge, declared "that the discovery of the dominant seventh lays open the principle for which pagan philosophers and Christians had been vainly groping through centuries while a veil of mathematical calculation hung between them and the truth." The curious feature of the history of its introduction lies in the fact that it failed of appreciation from orthodox musicians for a considerable period and actually met with organized opposition.

Even this brief sketch will suffice to show how greatly music developed during Columbus' Century. There is probably no corresponding period in the world's history that can show as much real advance that is lasting progress. Perhaps in no department of æsthetics does supposed progress come and go from generation to generation more easily than in music. What certain generations of musical critics have very highly praised is often judged by their successors quite worthless. The musical achievements of this period have, on the contrary, been beacon lights for succeeding generations. Whenever the principles that came to be accepted at this time have been much departed from, musical taste has proved false and musical accomplishment trivial. It is this sort of achievement, absolutely enduring in its quality, which above all counts for humanity, and it is nowhere so well illustrated in every department of intellectual effort as during this century of Columbus.

GERMAN MUSICIANS PLAYING ON THE VIOLIN AND BASS VIOL (LATE FIFTEENTH CENTURY)

The organ, as we have it at the present time, practically came into its modern shape during Columbus' Century. In the latter part of the fifteenth century the pedals and their application were developed by the organ-builders of the time, and in the first half of the sixteenth century pipes in large numbers came to be used, and the stops were arranged as in the modern organ. There are records of organ-building, particularly in France about the end of the first quarter of the sixteenth century, which show that the instrument had reached a very modern phase and that it was only a question of the adaptation of such mechanical aids as would enable the organist to control a greater number of pipes that was now needed to bring about the further development of this instrument. A good idea of the perfection of the organ at this time may be obtained from the description of one built at St. Maurice, Angers, France, in 1511, of which we have a detailed account in a legal process some years later. This contained two towers of thirty-five-foot pipe, forty-eight stops and a separate pedal. The independent pedal came into general use at this time. About this same time the violin began to develop and came very nearly into its modern form by the end of Columbus' Century, so that it was ready for the perfecting process which was to take place in the following hundred years.

CHAPTER X

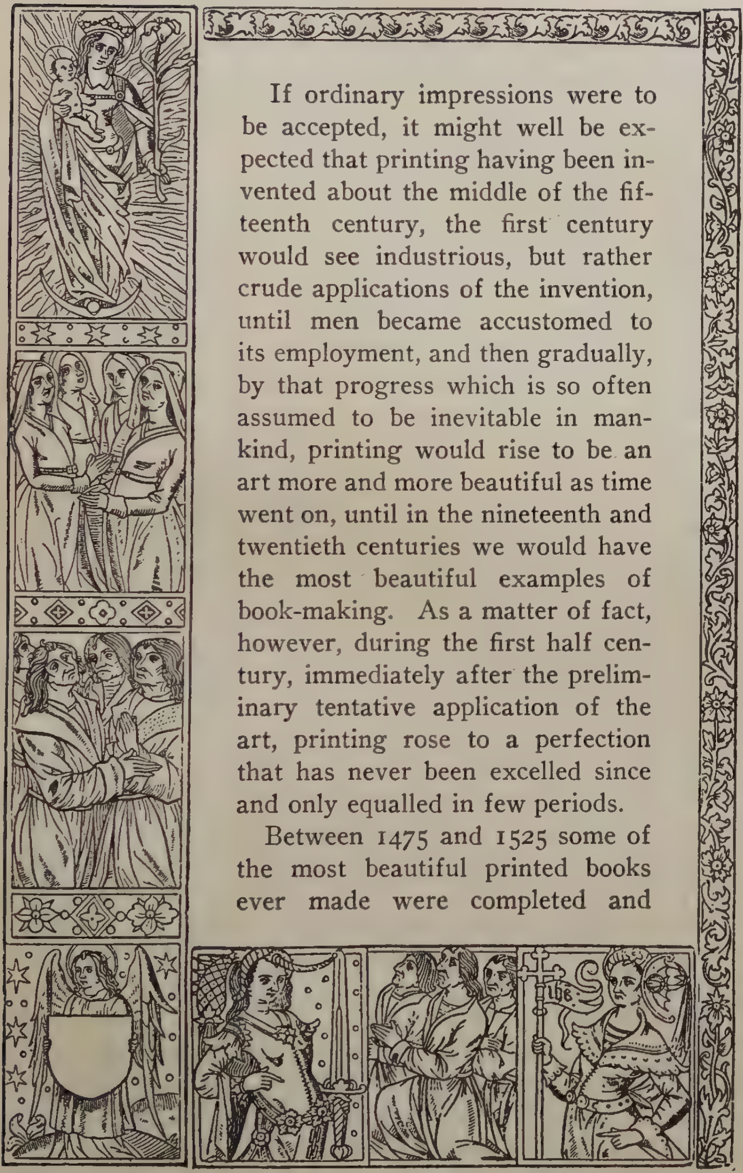
BOOKS AND PRINTS: WOOD AND METAL ENGRAVING

The scholarship of this century is well known to all the world, and the Renaissance is looked upon as the time when the deep knowledge of the classics, the New Learning or Humanism as it was called, awoke the modern spirit. The men of the time learned much from books. It is interesting to note, then, how much they did for books. The generations amply repaid the debt they owed to the past by what they accomplished for the preservation of the ancient writings, and above all by putting them in a worthy dress for the use and the admiration of future generations. The Renaissance must probably be considered to have appreciated books more than any other period in the world's history and to have done more to give dignity, beauty and permanence to the objects of their devotion.

It was no mere accident that just at the beginning of this period, about 1450, the invention of printing was perfected. Books had been rising in value and in price, though the demand had been constantly increasing, until it was only to be expected that some method of making them available for a much larger number of people must come. Necessity is the mother of invention, and the need for a thing sets men's minds at work until they have obtained it. Caxton's experience, detailed further on in this chapter, is illuminating in this regard. Great, however, as is the invention, the credit for which apparently must be shared by the Germans Gutenberg, Fust and Schoeffer, the use that was made of that invention during the century that followed is deserving of still higher appreciation. It had indeed come to a worthy time, but not by accident, for any time receives its deserts and wins the rewards of its own interests and efforts.

If ordinary impressions were to be accepted, it might well be expected that printing having been invented about the middle of the fifteenth century, the first century would see industrious, but rather crude applications of the invention, until men became accustomed to its employment, and then gradually, by that progress which is so often assumed to be inevitable in mankind, printing would rise to be an art more and more beautiful as time went on, until in the nineteenth and twentieth centuries we would have the most beautiful examples of book-making. As a matter of fact, however, during the first half century, immediately after the preliminary tentative application of the art, printing rose to a perfection that has never been excelled since and only equalled in few periods.

Between 1475 and 1525 some of the most beautiful printed books ever made were completed and

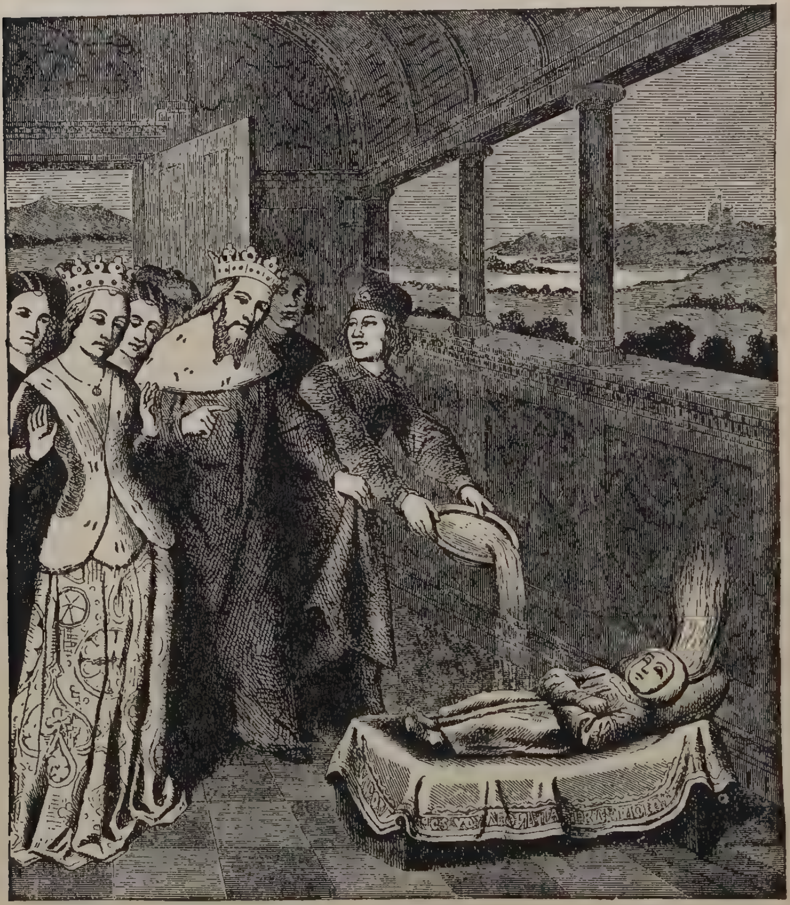


BORDER FROM THE "BOOK OF HOURS" OF ANTHONY VERARD (1488) worthily bound. Columbus' Century can boast the production of the most beautiful books in the world. Succeeding centuries saw a decadence in the arts of book-making which was progressive until the latter half of the nineteenth century. At that time some of the worst books ever made, with poorly designed, cheap type, still cheaper but fortunately perishable paper, sadly inartistic illustrations and ugly bindings, were made (*perpetrated* is the expression one book-lover has used). It must not be forgotten that this same decadence affected everything else, and that painting and sculpture and architecture reached their lowest ebb also in the nineteenth century, though the book continued to be in the depths for longer than any of the other products of the arts.

Fortunately, William Morris came to call attention to the utter ugliness of commercialized book-making and to arouse his generation to a noble effort for the recovery of the lost art. He demonstrated how artistically books might be made by taking as models the printed books of Columbus' time. He imitated as far as possible their beautiful hand-made paper without reflecting surface, of a tint that made the ink stand out on printed pages with wide margins and judicious spacing, with type faces eminently suited for easy reading, and made with an eye to real artistic quality and with ink that has not faded all these 400 years. All these were book qualities well worthy of emulation. The work has been taken up in many places since, and now beautiful books are not so rare as they were, though it is doubtful whether, even with all our mechanical appliances, our ability to sell reasonably large editions, the prosperity of the time and the interest of publishers and bibliophiles, we have succeeded in making any books that we would dare to set in comparison with a number of the volumes that were printed in Columbus' Century.

The perfection which book-making by hand had reached at the time when printing was invented and began to come into general use made it comparatively easy for excellent printed books to be made—excellent in the sense both of good printing and fine illustration. The " Books of Hours " of the later fifteenth century are among the most beautiful volumes that were ever made. They were finely written in a clear hand, beautifully decorated, handsomely illuminated and very suitably bound. Even the best painters did not hesitate to devote themselves to the making of illuminated illustrations for favorite volumes. The French were, as Dante suggests in Canto XI of the " Purgatorio," the best illuminators in his time, and they continued to maintain this superiority during the fifteenth century. Gerard W. Smith in his " Painting, Spanish and French " (Illustrated Handbooks of Art History), says that " the French school of miniature, though surpassed in seriousness and originality by those of Flanders and Italy, was yet skilful in appropriating many of the excellences of both. They surpassed the former in the general composition of their subjects and the latter in their perspective." The best known of their artist illustrators of this time was Jean Fouquet, the Court painter of Louis XI, whose work as painter is discussed in the chapter, Painting Outside of Italy. The pictures by him in the illuminated Josephus in the Paris Library are especially well known and often praised for their freedom of invention, their variety and the perfection of detail in their accessories. The compositions made for the illustration of Titus Livius, Livy the Latin historian, have been pronounced admirable for their naturalness and life. Fouquet is particularly happy in the landscapes which he introduces into his pictures and the architectural details which he adds. The miniature, which we have copied from the Livy manuscript in the Bibliothèque Nationale, illustrates all of these qualities very well and makes it clear that no element of artistic beauty or picturesque values was lacking in the books that were being made by hand when printing came to revolutionize the arts of book-making.

Some of the extra-illuminated books of this period are among the most beautiful printed books ever issued in their ornateness. Not long since Tregaskis advertised a little Book of Hours, printed by *Simon duBois pour maistre geofroy tori de bourges 1527*, at sixty guineas. He describes it as extremely rare and the first in which occurs the Arabesque border so frequently used by Tory and his successors in subsequent editions. Dibden, reproducing some of the borders in his " Bibliographical Decameron," said that he had seen nothing more beautiful of this kind. Each page is printed within a varying woodcut border of birds, fish, flowers and insects, with the initials of the Queen Mother and of the King and Queen crowned, in combination with the arms of France and Savoy. This is, of course, the period when these books were most beautifully done. There are a number of examples of them that have appeared in the sales in recent years and have



FOUQUET, JEHAN, MINIATURE PAINTING, FROM THE LIVY MSS.
(BIBLIOTHÈQUE NATIONALE, PARIS)

commanded high prices not alone because of their antiquity, but because of the exquisite charm of their decorations.

It was in competition with such exquisite books that the early printers found themselves. No wonder, then, that they were stimulated to do beautiful work and that their best efforts were aroused. The fine, broad enterprise of the printers of the time can be very well appreciated from the rapid development of their art and craft by the making of fonts of letters for all the different alphabets. Greek type was made as early as 1465. The first book wholly printed in Greek minuscules was Lascaris' Grammar at Milan in 1476. The first Hebrew types appeared as early as 1475. Aldus' famous Italic type, said to be an imitation of the handwriting of Petrarch, was introduced by Aldus Manutius of Venice for his projected small edition of the classics. The cutting of it was probably done by the painter Francia (Raibolini). It was first used in the Virgil of 1500. Arabic types were first used for the printing of a book in 1514 at Fano in Italy. Syriac was used for printing as early as 1538, and just after the end of Columbus' Century excellent types of this language were in use. A Psalter was printed in Russian at Cracow as early as 1491, and the Russian types were used at Prague in 1517. Anglo-Saxon and Irish types were used shortly after the end of Columbus' Century.

Music printing began early, the earliest specimen of music type occurring in Higden's " Polychronicon," printed by Wynken de Worde at Westminster in 1495. Notes had been printed from wooden blocks twenty-five years earlier, though some books had spaces left to be filled in by hand. About 1500 a musical press was established at Venice. Toward the end of the century special types and presses of many kinds for music were invented.

The great English printer of this time, William Caxton, is a characteristic type of the scholarly printers of the period. We know almost nothing about his life. He records his thanks to his parents for having given him an education that fitted him to earn a living, though he does not say where or how he was educated. Just about the beginning of Columbus' Century he settled at Bruges, going into business on his own account, and soon became prosperous. He had been an apprentice to Robert Large, a wealthy London mercer of the time, who was one of the influential men of the period. In 1453 Caxton returned to England for his formal admittance as a member of the Mercers' Company. His story after this is not unlike that of Schliemann, the discoverer of Troy in our own time. He retired from business apparently with a competency, entered the service of Margaret Duchess of Burgundy, probably in order to have more time for his literary work, and the next year he finished his translation from the French of the "Recuyell of the Historyes of Troye," which was dedicated to Margaret. His book was very much sought after and circulated in manuscript. The task of copying it was too great and entirely too slow for the demand. With true business instinct, Caxton then "practysed & lerned at grete charge and dispense to ordeyne this said book in prynte." His book was printed at Bruges in 1474. The next year his second book, the "Game & Pleye of Chess," which he had also translated from the French, was printed.

The following year, 1476, Caxton returned to England and set up his own printing press at Westminster. The first issue from his press was the "Dictes and Sayings of the Philosophers," which bears the date 1477. Though he died fourteen years later, in 1491, he is said to have issued ninety-six books from the Westminster Press in the intervening brief period. His publications include the works of Chaucer and Gower, Sir Thomas Malory's "*Morte d'Arthur*" and a number of translations from French, Latin and Dutch, most of them probably made by himself and all of them under his editorial direction. He issued a number of smaller pious books which show his deep religious interest. Though brought up to a trade which he pursued successfully until he had made money, he was a scholarly man who wrote excellent vigorous English and had an ardent enthusiasm for literature. He is one of the greatest forces in English prose before the sixteenth century, and with Sir Thomas More helped to fix it in the form in which it was to pass to the Elizabethans and be given our modern shape. His life is the best possible evidence of the opportunities for education that abounded at the beginning of Columbus' Century, and which even those quite outside of what would ordinarily be thought the possible chances for the higher education might readily secure.

The story of the great printers of the Renaissance might well be summed up in the work of the Venetian, Aldus Manutius, who was a distinguished scholar as well as publisher. Born 1450, he was a pupil of Guarino of Verona, and having studied Greek very faithfully, resolved to print all the Greek classics. He adopted the handwriting of Musurus as the model on which his Greek type was cast and then proceeded to make arrangements for worthy publication. The ink was made in the publishing house and only the best materials employed. He had special paper from the mills of Fabriano, and the bookbinding was done in a separate department of his own establishment.* The result was the magnificent set of Editiones Principes issued by his house. The first of these was Musaeus, printed in 1493. Altogether twenty-eight *editiones principes* of the

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* The lofty motives that impelled men to take up the art of printing can be very well appreciated from some expressions of Aldus in this matter. As a boy he had been shy, awkward and retiring, and although receiving his education in the best schools of Ferrara and Rome, he had not shown any marked ability. For a time he seems to have studied for the priesthood, but instead became a tutor for princely houses. This gave him sufficient for his modest tastes and a quiet, scholarly life. At the age of forty he gave up this career, and with little money began to edit and prepare for printing the works of almost forgotten Greek authors. This was about the time that Columbus launched his vessels to sail to America. Early as this date might seem to be in the history of the art, printing had already been overdone. When Aldus reached Venice there were or had been 160 printers or publishers in that city. Most of them were poor, some of them were bankrupt and none of them were making any money that might be expected to tempt a man of forty without experience to take up a business career. The state of the trade at Rome was scarcely better. Italy was disturbed by rumors of impending war. It was under these conditions that Aldus declared in the preface of one of his early books:

"I have made a vow to devote my life to the public good. God is my witness that this is my most earnest desire. . . . I leave a peaceable life, preferring this which is laborious and exacting. . . . Man was not born for pleasure unworthy of an elevated spirit, but for duties which dignify him. Let us leave to the vile the lower life of animals."

Greek and Latin classics were issued in some twenty-two years. His trade symbol, the Dolphin and the Anchor, signifies speed and tenacity. In reference to it, Aldus himself once said, "I have achieved much by patience (the word he used was *cunctando,* literally by taking my time) and I work without pause." As we have said, Aldus invented the form of type called Italic, for which he received a patent from Pope Leo X. In 1500 Aldus printed the first leaf of a proposed Bible in Hebrew, Greek and Latin—a Polyglot Bible which was never completed. His work was carried on after his death in 1515 by the Asolani, his brothers-in-law, and later by Paolo Manuzio, his son, and afterwards by another Aldus, his grandson. In 1518 the Aeschylus was printed, and there was then no extant Greek classic of the first rank unprinted.

Aldus devoted himself to the printing of the classics and quite neglected the theological works which were so popular, at least among the printers of the time. After seven years of the hardest kind of work he said, "In this seventh year of my self-imposed task I can truly say—yes, under oath—that I have not during these long years had one hour of peaceful rest." In 1498, perhaps from overwork, but more likely from neglect of the ordinary care of nature in regular eating and sleeping, he came down with a severe illness. During his illness his thoughts went back to his student days and he vowed that he would become a priest if he recovered. After his recovery, however, he asked and obtained a release from this obligation. The next year he married the daughter of an eminent brother printer, Torresano of Asola, and though there was great difference in their ages, Aldus being fifty and his wife scarcely twenty, it seems to have proved a happy marriage. Aldus' health was better cared for after this, and then his thrifty father-in-law, who was a successful publisher, probably helped him with many suggestions, as a consequence of which Aldus made his books cheaper and more widely salable, and henceforth we have less querulousness over the neglect of the public to buy.

Aldus was one of the busiest of men. His motto was *festina lente* (make haste slowly). He says in one of his books, "You do not know how busy I am; the care I have to give to my publications does not allow me proper time to eat or sleep." In self-defence against bores, and it is easy to understand how many there might be in this period of reawakened interest in scholarship who would think that they could occupy a few hours pleasantly and profitably for themselves in Aldus' establishment, he put this warning on his door:

"Whoever you are, Aldus entreats you to be brief. When you have spoken, leave him, unless you come like Hercules to help Atlas, weary of his burden. Know that there is work here for everyone who enters the door." Practically every important printer and publicist ever since has had to try to protect himself and his time in some similar way. Human nature, or at least the human nature of bores, has not changed any in these five centuries.

In spite of all that he did for his generation, he met with little of gratitude and almost less of personal appreciation. There were many distinguished scholars who were dear personal friends, there were many high ecclesiastics who admired and helped him, there were many noble patrons and clients of his house who must have brought him much consolation. But he had his critics as well: Erasmus could not refrain from some biting witticisms with regard to the frugality of his table, being himself somewhat of a glutton. Scaliger indeed said of him that he drank like three, but did only half the work of one man, while Aldus was very abstemious. Besides, Aldus complained that his books were fraudulently reprinted, that his workmen were tempted away from him after he had trained them, and that he even had to defend himself against the treachery of his own employees at times. Already at that time they were beginning to complain of the injustice done the author by lack of copyright. Erasmus complained: "Our lawmakers do not concern themselves about the matter. He who sells English cloth for Venetian cloth is punished, but he who sells corrupt texts in place of good ones goes free. Innumerable are the books that are corrupted, especially in Germany. There are restraints on bad bakers, but none on bad printers, and there is no corner of the earth where bad books do not go."

A writer in the old *Scribner's Magazine* for October, 1881, summed up what Aldus had accomplished for his profession in a paragraph that evidently comes from a man who knows his subject well and probably in the modern time has faced some of the problems that Aldus had to meet, though with the advantage of the experience of over four centuries since to help him in solving them.

"Considering the difficulties he had to encounter, not the least of them the difficulty of getting compositors who could read Greek MSS. and compose Greek types, it is a wonder that they are as correct as they are. Some of them are above reproach. When he offered to the reader of his edition of Plato, as he did in the preface of that book, a gold crown for every discovered error, he must have had a confidence in its accuracy which comes only from the consciousness of thorough editorial work. Aldus' taste as editor went beyond the text. Not content with an accurate version, he had that version presented in pleasing types. Everybody admits the value of his invention of Italic, even if his use of it as a text-letter be not approved. But few persons consider that we are indebted to Aldus for the present forms that he introduced. How great this obligation is will be readily acknowledged after an examination of the uncouth characters and the discordant styles of Greek copyists before the sixteenth century. Aldus' invention of small capitals has already been noticed. Here, then, are three distinct styles of book-printing types which he introduced, and which have been adopted everywhere almost without dissent. Other printers have done work of high merit; other type-founders have made pleasing ornamental or fancy types; but no printer or founder since Aldus has invented even one original style of printing types which has been adopted and kept in use as a text-letter for books." *

The other most distinguished printer of Columbus' Century whose career deserves to be sketched at some length was the Frenchman, Geoffrey Tory or Trinus, who is not so well known as Aldus, coming a little later in history, but whose work was of the highest artistic character. Like Aldus, he

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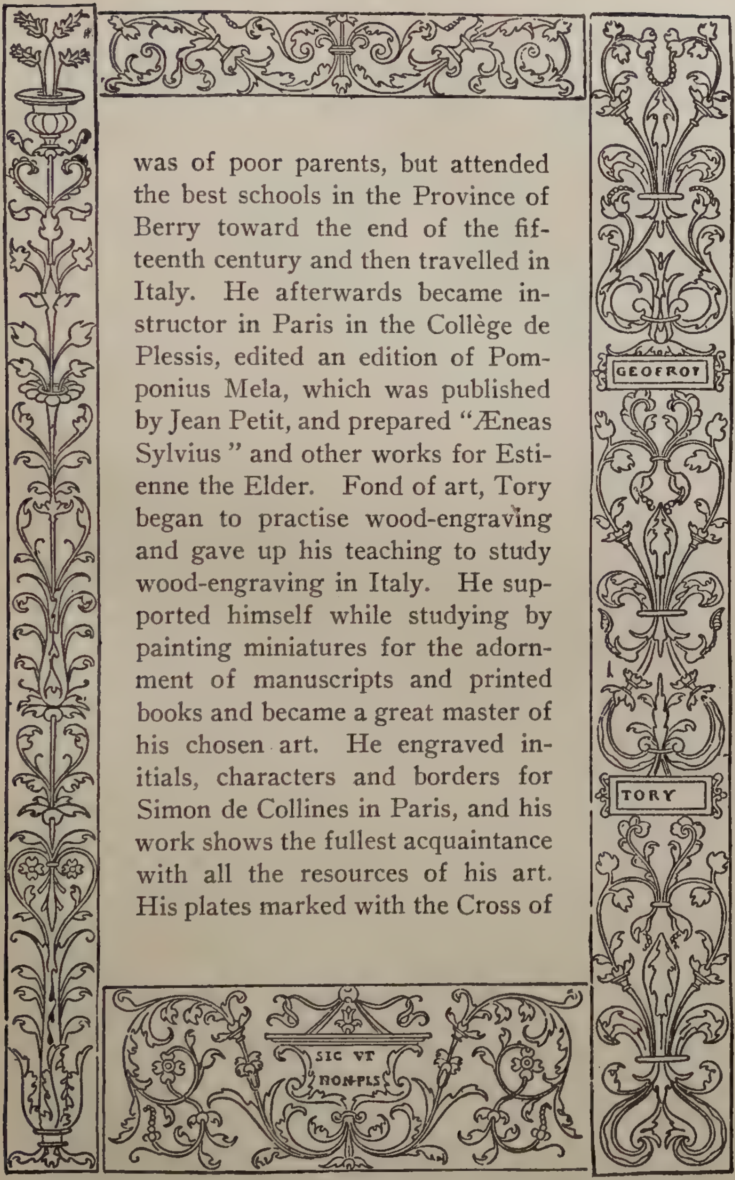
* It was after Grolier's visit to Aldus in Italy that he took up the making of that collection of beautifully bound and printed books which have since made him famous; he evidently owed the inspiration not a little to the great Italian printer.

was of poor parents, but attended the best schools in the Province of Berry toward the end of the fifteenth century and then travelled in Italy. He afterwards became instructor in Paris in the Collège de Plessis, edited an edition of Pomponius Mela, which was published by Jean Petit, and prepared "Æneas Sylvius" and other works for Estienne the Elder. Fond of art, Tory began to practise wood-engraving and gave up his teaching to study wood-engraving in Italy. He supported himself while studying by painting miniatures for the adornment of manuscripts and printed books and became a great master of his chosen art. He engraved initials, characters and borders for Simon de Collines in Paris, and his work shows the fullest acquaintance with all the resources of his art. His plates marked with the Cross of



BORDER FROM "BOOK OF HOURS," GEOFFREY TORY (1525)

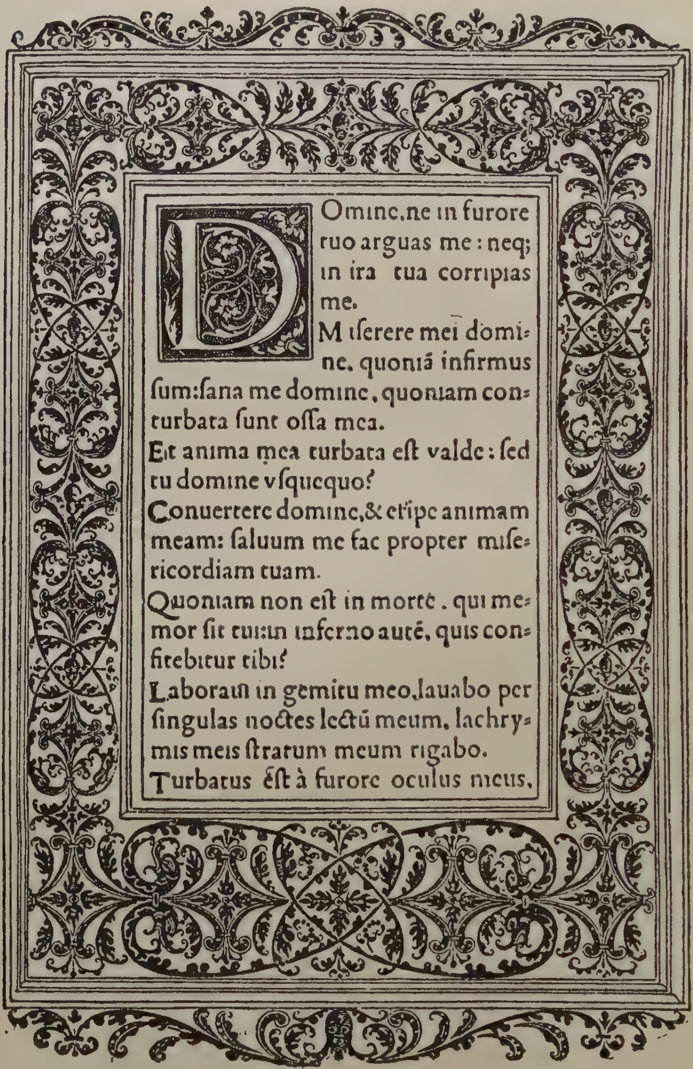
Lorraine are now considered worthy of a very high place in every choice collection.

His principal contribution to book-making was his remarkable original work called "Champ Fleury." This book was divided into three parts for the instruction of printers. The first of these parts contained a treatise upon the proper use of letters. The second treated of the origin of the capital letter and its proper place. The third contained accurate drawings of letters and a large number of alphabets of various kinds, so that proper selection of type might be made for various kinds of books and varying sizes according to space and page. This work had a far-reaching influence. One result was an immediate and complete revolution in French typography and orthography—the abandonment of the Gothic and the adoption of the new cutting of antique type. After having been used for several centuries, the faces of the type thus produced were abandoned for a time and are now being revived. In this book also Tory laid down the rules for the proper use in French of the accents, apostrophe and marks of punctuation. He did more than anyone else to settle these vexed problems of usage for the world. The publication of the book won from Francis I, himself a scholar and patron of learning and an author to whom so much is owed in the French Renaissance, the title of King's Printer. Some of Tory's borders are illustrated on these pages. They have been fruitful models full of suggestion for such work ever since.

With the development of printing, the need of methods of multiplying illustrations for printed books soon made itself felt and was finely responded to by the genius of the century. Wood-engraving in the service of book-illustration came in very early in the history of printing and was, after all, only a development of the wooden blocks, out of which the first idea of movable types had originally sprung. It was very crude at the beginning, and yet often with an artistic expression that gives it great interest. Its possibilities for printing in company with movable types soon began to be realized, and as printed books became more beautiful and type faces more artistic, the necessity for supplying artistic illustrations was felt, and then it was not long before the need was supplied. Probably the first wood-engraving designed for book-illustration which exhibits a marked artistic quality was "The Dream of Polifilo," in which, as Woodberry says in his "History of Wood-Engraving," "Italian wood-engraving, quickened by the spirit of the Renaissance, displayed its most beautiful creation." It was written by a Venetian monk, Francesco Colombo, in 1467, and was first printed by Aldus in 1499. The subject was a worthy one, for though the book is a strange mingling of Greek, Latin, Hebrew and Arabic traditions and poetic symbolism, it typifies the spirit of the Renaissance. It represents the search of youth for the loveliness of universal nature and the perfection of ancient art under the title of Polia, the charming maiden who combines all the qualities. Altogether there are 192 designs. They have been attributed to many illustrious masters, even John Bellini and Raphael, among others, but were probably due to Benedetto Montagna.

How soon illustration came to aid in the understanding of the text in books is very well illustrated by Fra Giocondo's work. When, in 1508, he published the letters of the younger Pliny in the Aldine edition, he not only described but illustrated the villas of the ancients. In 1511 he edited the Aldine edition of Vitruvius, with its rude woodcuts that are yet much more thoroughly illustrative than many a more ambitious modern book and which include the first modern plan of a Roman house. When he issued his Aldine edition of Cæsar in 1513 this was illustrated with the earliest of all modern drawings of Cæsar's bridge across the Rhine. Fra Giocondo is in fact the true father of the illustrated classic, as Sandys suggested in his Harvard Lectures on the "Revival of Learning" (Cambridge University Press, 1905). It may be well to add that the good friar was no mere student for erudition's sake, since, as is noted in the chapter on architecture, he entered the royal service in France, and in 1497 designed one at least, if not two, of the noble bridges that still span the Seine.

The great improvement which came in book-illustration and the making of prints we owe to Albrecht Dürer, who not only was the first to discover the capacities of wood-engraving as a mode of artistic expression, but who saw immediately that it



Omine,ne in furore
tuo arguas me : neq;
in ira tua corripias
me.
Miſerere mei domi=
ne, quoniá infirmus
ſum:ſana me domine, quoniam con=
turbata ſunt oſſa mea.
Et anima mea turbata eſt valde : ſed
tu domine vſquequo?
Conuertere domine,& eripe animam
meam: ſaluum me fac propter miſe=
ricordiam tuam.
Quoniam non eſt in morte. qui me=
mor ſit tui:in inferno auté, quis con=
fitebitur tibi?
Laboraui in gemitu meo,lauabo per
ſingulas noctes lectũ meum, lachry=
mis meis ſtratum meum rigabo.
Turbatus éſt à furore oculus meus.

PAGE OF "BOOK OF HOURS" MADE FOR SIMON DE COLLINES
(TORY)

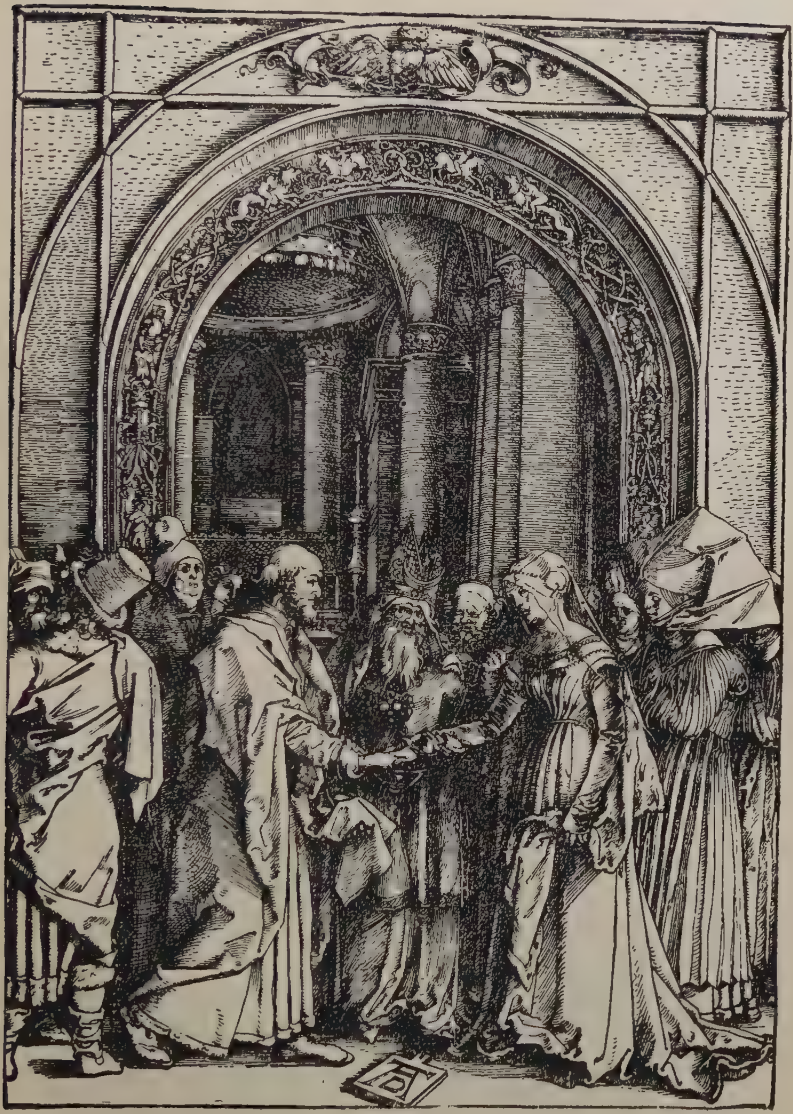
could not equal the rival art of copperplate-engraving in that delicacy of line and depth of tone on which the metal-engraving depends for its excellence, but appreciating the limitations, Dürer prescribed the materials and processes of wood-engraving. He increased the size of the cuts, gave breadth and boldness to the lines and obtained new and pleasing effects from strong contrasts of black and white. As Woodberry in his "History of Wood-Engraving" (Harper's, New York, 1883) says: "He thus showed the true method of wood-engraving; but the art owes to him much more than this: he brought to the practice of it the hand and brain of a great master, lifted it, a mechanic's trade, into the service of high imagination and vigorous interest and placed it among the fine arts—a deed of far more importance than any improvements in processes or methods." In so doing, may we add that he only accomplished what so many of his contemporaries did in other arts. The goldsmiths became sculptors and painters, the decorators became true artists and the scholars learned from their classical books to execute what they had studied in the ancients.

It would be hard to say enough of Dürer's wood-engravings. His prints must be allowed to talk for themselves. Unfortunately, owing to limit of space, we are only able to give one of them, but that will furnish an excellent example of the marvellous qualities Dürer succeeded in expressing, in what might have seemed before this time a hopelessly coarse medium. The first of the four famous series of designs by which his skill in wood-engraving is first shown was published in 1498, but it was probably finished before that time. It consisted of fifteen large woodcuts in illustration of the Apocalypse of St. John, to which a vignette of wonderful nobility and simplicity was prefixed.

Other men did wonderful work in this new medium, after Dürer had shown them the way, though none of them surpassed or perhaps even equalled their master. Portions of the triumphal procession of Maximilian by Hans Burgkmaier show that his disciples were thoroughly capable of following in his footsteps. Such men as Hans Schaeuffelin and Hans Springinklee, as well as Hans Baldung, far surpassed most of their successors in the artistic quality of their wood-engraving. Lucas van Leyden and the Cranachs show how artists took to this new mode of expression, and a series of men working in this century prove the wonderful power of the time to stimulate men's genius.

Besides Dürer and the group who were largely influenced by him, one man, Hans Holbein, deserves special mention because he illustrates especially the connection of the new art with book-making. Holbein commenced to practise wood-engraving as soon as he settled in Basel at about the age of twenty. He began by designing the title page, initial letters and woodcuts for the publishers of that period. He illustrated the books of the humanists, especially the "Utopia" of Sir Thomas More, then a new and popular work, and afterwards designed the woodcuts for the Biblical translation of Luther, and he did some excellent caricature work. He is a realist and has illustrated particularly humble life, incidents of the daily doings of peasants and children, and these scenes are sometimes introduced as the background of initial letters, some twenty alphabets of which are ascribed to him. Geoffrey Tory in France introduced a classical spirit into wood-engraving, and the sculptors, Jean Cousin and Bernard Salomon and especially Jean Goujon, who made some excellent cuts for Vitruvius (1547), and a group of other illustrators in France, serve to show how the art spread and was used all over the world.

Another interesting development both in prints and in book-illustration came in the gradual evolution of metal-engraving, which, like wood-engraving, reached some of its highest perfection in Germany. Martin Schongauer, who died in 1488, is the first important name, though he was preceded by an unknown German engraver usually spoken of as "The Master of 1466." Schongauer used curved shading and greatly developed the technique. After him came Dürer, who lifted metal-engraving, especially copperplate-engraving, into the realm of art. Probably nothing illustrates so well his power of minute observation as some of his copperplates. His animals are reproduced with fidelity and charm, and in the early days of landscape painting he studied every leaf and branch and tree trunk and knew how to picture just what he saw. The climax of artistic quality was reached by Marcantonio in Italy, who



DÜRER, MARRIAGE OF THE BLESSED VIRGIN (WOODCUT, 1511)

worked under the direction of Raphael. After the work of these masters there was very little left to be added by subsequent engravers. How much the illustration of books was helped by this new development of art can be very readily appreciated by those who know some of the old books. Even technical books, such as text-books of anatomy, were beautifully illustrated from copperplates that are not merely conventional pictures, but often real works of art. The plates for Vesalius' anatomy were probably prepared under the direction of Titian by one of his best students, Kalkar, and Eustachius' anatomical plates probably also had the counsel of a great artist.*

While the inside of the book was cared for so thoroughly and thoughtfully the outside of it was not neglected. This is the period when the most beautiful bindings in the world were made. The name of the Grolier Club in New York is testimony to this, for when our American bibliophiles wanted to name their association worthily they took their title from the great book-lover of Columbus' Century, Jean Grolier, the Treasurer of France, who did so much to encourage the beautiful book-making of the time. The collection of books made by Grolier is probably the most famous ever brought together. They were beautifully printed on the best of paper as a rule and most fittingly and artistically bound. The life history of practically every one of them has been traced, and many a book-lover has purchased immortality at a comparatively cheap price by having at some time or other been in possession of one of Grolier's books, for the name of every possessor is chronicled as a rule. Many a book-owner of our time has his only chance for being known in the time to come from the fact that he has one of Grolier's books in his library.

The beautiful bindings need to be seen to be appreciated, but every phase of artistic adornment in books was exhausted. While leather was the favorite material for binding, silk and tapestry and plush were used, and ornamentation of all kinds,

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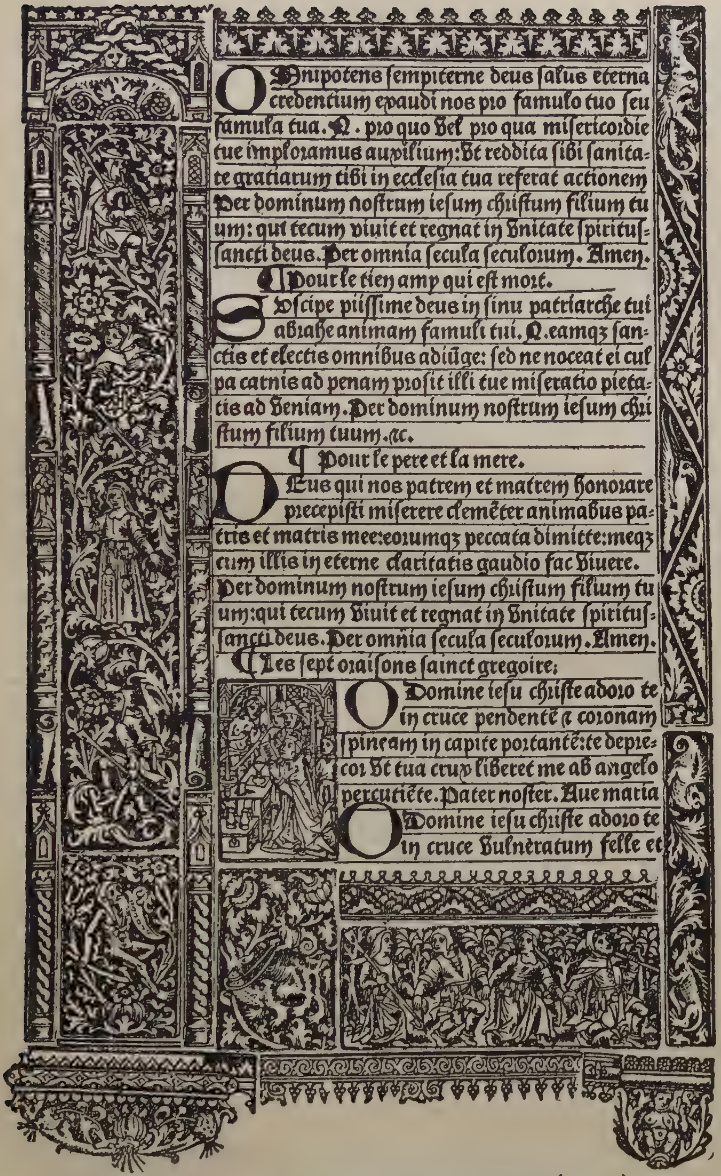
*How much the book-making and bookbinding of this period is appreciated in our time will perhaps be best and most easily realized from the following item: "At the sale of Lady Brooke's Library at Sotheby's, Mr. Quaritch bought for $1,500 the well-preserved copy of Livy, dated 1543, in a fine contemporary morocco binding, and paid $1,475 for a copy, dated 1533, of Petrus Martyr's '*De Rebus Oceanicis, et Orbe Novo*'" (New York *Herald*, Nov. 26, 1913).



Omnipotens ſempiterne deus ſalus eterna credentium exaudi nos pro famulo tuo ſeu famula tua. N. pro quo vel pro qua miſericordie tue imploramus auxilium: vt reddita ſibi ſanitate gratiarum tibi in eccleſia tua referat actionem Per dominum noſtrum ieſum chriſtum filium tuum: qui tecum viuit et regnat in vnitate ſpiritusſancti deus. Per omnia ſecula ſeculorum. Amen.

¶ Pour le tien amy qui eſt mort.

Suſcipe piiſſime deus in ſinu patriarche tui abrahe animam famuli tui. N. eamqz ſanctis et electis omnibus adiũge: ſed ne noceat ei culpa carnis ad penam proſit illi tue miſeratio pietatis ad veniam. Per dominum noſtrum ieſum chriſtum filium tuum. ⁊c.

¶ Pour le pere et la mere.

Deus qui nos patrem et matrem honorare precepiſti miſerere clemẽter animabus patris et matris mee: eorumqz peccata dimitte: meqz cum illis in eterne claritatis gaudio fac viuere. Per dominum noſtrum ieſum chriſtum filium tuum: qui tecum viuit et regnat in vnitate ſpiritusſancti deus. Per omnia ſecula ſeculorum. Amen.

¶ Les ſept oraiſons ſainct gregoire:

O Domine ieſu chriſte adoro te in cruce pendentẽ ⁊ coronam ſpineam in capite portantẽ: te deprecor vt tua crux liberet me ab angelo percutiẽte. Pater noſter. Aue maria

O Domine ieſu chriſte adoro te in cruce vulneratum felle et

BLACK-LETTER WITH BORDERED PAGE (1520)

metal, tortoise shell and precious stones, was employed. There probably was never more taste displayed than at this time, and though subsequent workmen learned to finish much better, the best bindings of the modern time scarcely compare with those of Columbus' period in artistic quality.

Brander Matthews in his "Bookbindings, Old and New," said: "We must confess that there are very few finishers (of books) of our time who have originality of invention, freshness of composition or individuality of taste." He proceeds to say that in our time we have a more certain handicraft, but less artistic quality. The handicraft has improved, the art has declined. The hand has gained skill, but the head has lost its force.

In our time we are again coming to appreciate properly the value of beautiful books. There have been periods between ours and Columbus' Century when only the most sordid ideas obtained in the book world, or when bad taste ruled and bookbinding, like printing and the other arts, had a period of decadence after the sixteenth century, that is hard to explain, though it is easy to find reasons for it, and which continued to sink books into ever greater and greater lack of artistic qualities until almost the twentieth century. Out of that pit dug by neglect of interest in the beautiful as well as the useful we are now climbing, but unfortunately many of our time are inclined to think that this is the first time there has been that emergence, though we are only beginning, as yet distantly, to imitate the beauties of book-making in the mediæval and Renaissance periods.

Even more interesting for the modern time is the attitude of these great collectors of books of Columbus' time toward their precious treasures. They did not consider that they belonged to themselves alone, but to all those capable of using them. The distinguished Italian collector who preceded Grolier, Maioli, had the motto printed on his books, *Tho. Maioli et amicorum*—that is, "the property of Thomas Maioli and his friends." A number of other book-collectors, including Grolier, imitated this. Maioli is said to have had the true amateur spirit and to have taken up the making of beautiful bindings for himself. Geoffrey Tory also devoted himself to bookbinding as well as to wood-engraving and his work for the printers. In a word it was a time when men were intent on making the book just as beautiful as possible, while all the time bearing in mind that its utility must be its principal characteristic.

PLAYING CARD, FRANCE, FIFTEENTH CENTURY

BOOK II

THE BOOK OF THE DEEDS

CHAPTER I

SOCIAL WORK AND WORKERS

Any century that does not display an important evolution of works for the benefit of the poor whom we have "always with us," of organized effort for the ailing who are inevitable in the present state of man's existence, as well as some general recognition of social duty towards the great body of men and women who must always be helped to make something out of their lives, because they lack initiative and power of accomplishment for themselves, does not deserve a place among the great centuries of human existence. Columbus' Century is in this regard one of the notable periods of human history. It saw the building of magnificent hospitals in many countries, a phase of its history so full of importance that we have had to reserve its treatment for a special chapter on hospitals. It saw the organization of many means of helping the poor, and particularly of definite methods for the care of the old and the young, for the disabled and unfortunate, and the origin of the institutions through which the poor for their little pledges might secure loans to tide them over the recurring crises of existence. Besides there were many asylums, in the best sense of the word, founded for the care of the insane and chronic sufferers of other kinds, and many other institutions of charity were organized and established in such forms as to do the greatest possible amount of good. Above all, this century saw the establishment of a number of religious orders which were to accomplish social reforms of many kinds, and the founders of which were to provide by their example and advice the proper encouragement for many charitable foundations.

The most interesting development of helpfulness at this time came in connection with the many guilds which reached their highest development at the end of the fifteenth century. These guilds took care of the disabled, supported the old, took charge of orphans, gave technical training to the children, founded schools in many places and often sent the more intelligent boys even to the university, and provided various entertainments during the year for the members of the guilds and their neighbors and townsfolk. How universal was their effect upon the life for instance of the English people will be best appreciated from the calculation of Toulmin Smith, whose authority in all that relates to the history of the English guilds is unquestioned, that there were some thirty thousand of these brotherhood institutions in existence in England about the beginning of the sixteenth century.

They touched every phase of the social life of the time and helped in the solution of many of the social problems. They provided insurance for their members against loss by fire, by robbery, at sea, by the fall of a house, by imprisonment and even against loss from flood. There was insurance against the loss of sight, against the loss of limb or any other form of crippling. The deaf and dumb might be insured so as to secure an income for them and corresponding relief for leprosy might be obtained, so that if one were set apart from the community by the law requiring segregation of lepers there might be provision for food and lodging even though productive work had become impossible.* There was also insurance for the farmer against the loss of cattle and farm products.

There were no poorhouses and no orphan asylums. We have just come to recognize once more that the best possible guardian, as a rule, for children is their mother, if she is alive. It is cheaper in the end to help her to keep the family together than to put them into institutions, and the home training is almost infinitely better. They recognized this fact very clearly in the later Middle Ages and in Columbus' Century, and if mother were dead, and father could not keep the children, which was very rarely the case, or if both parents were dead, the children were distributed in families which adopted them with the specific agreement that they should be looked upon as members of the family. The guild officials looked after these children and saw that they were not abused and obtained special opportunities for their training, and supplied a dowry very often for the girls when they married. Indeed, there was a tradition that " the children of the guild," as these orphans were called, were likely to have better opportunities in life than those whose parents were still living.

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* Walsh, "The Thirteenth Greatest of Centuries," Catholic Summer School Press Appendix, fifth edition, New York, 1912.

In spite of all their care for the poor, the time had, as every time has had, the problem of the ne'er-do-well, the man with the *wanderlust,* who will not settle down anywhere and cannot be expected to keep steadily at work. They dealt with what we have come to call the tramp rather well. Above all, they avoided many of the abuses of public begging. The method is worth while noting. When a member of the guild died every member was expected to attend his funeral. Those that did not were fined a small sum, but yet sufficient to deter them from neglecting this obligation unless compelled by some necessity. These fines went into the common fund for the benefit of the poor and were given as alms for the intention of the dead brother's soul. Besides, every member was expected to give a small coin as further alms for the dead, and this sum of money was deposited with the treasurer of the guild for this special purpose. Each one who gave an alms was handed a token, which he might use as he saw fit. When a member of a guild met someone who looked as though he needed help, instead of giving him money he handed him this token and then the beggar might obtain whatever he needed most—food, lodging or clothing—by presenting the token to the treasurer of the guild, the sexton of the church or any of the church wardens or the clergy. This prevented the abuse of charity, gave immediate relief where it was needed and did not pauperize, because the person benefited knew that the intention in what was given him was the benefit of a dead brother's soul and not merely pity for him.

The number and efficiency of the activities of the guild can be best understood from a study of the history of the Guild of the Holy Cross at Stratford. Owing to the fact that interest in Shakespeare has led to a very careful study of every possible scrap of information with regard to the life of the town during the century before his time, we are in possession of many details with regard to it. The Guild of the Holy Cross at Stratford came to represent nearly every form of initiative for the good of the townspeople. They had their periodic banquets, provided pageants, took care of the poor, built almshouses that were very different from poorhouses, cared for the orphans and disabled and supported the grammar school as well as helping some of their members to the higher education. The guild became so famous for its benefactions to the life of the town that distinguished members of the nobility and judges, members of the professions and prominent merchants from all the surrounding neighborhood asked and obtained the privilege of becoming members. The guild acquired property and had a definite income. We know that in 1481 it acquired the rectory of Little Wilmcote, where the Ardens, the ancestors of Shakespeare's mother, had property, with all its profits.

One very interesting development in Stratford shows the difference between the poorhouses of subsequent centuries and the almshouses of Columbus' Century. Just next to the Guild School and Chapel in Stratford there is a row of little houses rather strange looking now, but not so unlike the houses of the time in which they were erected as to be noticeable. There are a dozen or more of these in which the aged poor were to live, husband and wife occupying the ground floor of a little house by themselves. Places were also provided in the upper stories of these houses for the widowers, spinsters and old bachelors who had become too old for work. They are neat little quarters, in which the old folks still live contented and which the visitor to Stratford finds of very great interest. The guild chapel not being far away, a few hundred feet from the farthest of them, even the feeblest of the old people who were not actually bedridden could have the consolation of going to church and special services at convenient hours were held for them. As a matter of fact, after the rebuilding of the chapel by Sir Hugh Clopton, a great many of the townspeople, except on high festival days, used to go to the guild chapel because of its convenience rather than to Trinity Church outside the town. The boys at the guild school hard by played in their yard, where the old folk could see them, thus providing the best possible pastime for their elders, while during the day the busy traffic of a main travelled road went by them, furnishing further distraction.

The grammar school which was founded and supported by the guild deserves particular mention. It was free to the children of the members of the guild, and the schoolmaster was forbidden to take anything from his pupils. The master of the guild paid him an annual salary. The date of its origin used to be set down as 1453, but it is now known to have been in existence much earlier, though a thorough reorganization took place at this time, giving rise to the idea of its actual foundation. How successful it was in its work may be gathered from the number of Stratford men who came to hold high positions in England—there being no less than three Lord Chancellors in one century—and from what we know of it in Shakespeare's time. It was suppressed under Henry VIII, but owing to the disaffection among the people it, as well as a number of other institutions of the kind, were reëstablished under Edward VI and have come to be known as Edward VI Grammar Schools. As Gairdner has emphasized, there is very little reason for this designation. The new foundations were made most grudgingly and economically, considering the vast funds that had been confiscated. The grammar school was so effective in its teaching, however, that even the merchants' sons in Stratford wrote to one another in rather good Latin. Some of the letters are extant.

Some of these details serve to show very well the character of the social work accomplished by the guild, especially in its school and its almhouses. Sir Sidney Lee continues: "But in 1547 all these advantages ceased: The guild was dissolved and all the property came into the royal treasure." The account of what happened to some of these long-established funds for the benefit of the poor and of education is to be found in his chapter. They were transferred to favorites of the King, who used them for various unworthy purposes and, above all, merely to keep up with the pampered luxury of the time.

Rev. Augustus Jessop, the Anglican rector of Scarning, in his volume of essays, "Before the Great Pillage," tells of other parts of England and that "the almshouses in which old men and women were fed and clothed were robbed to the last pound, the poor almsfolk being turned out in the cold at an hour's warning to beg their bread. Hospitals for the sick and needy, sometimes magnificently provided with nurses and chaplains, whose very *raison d'être* was that they were to look after the care for those who were past caring for themselves, these were stripped of all their belongings, the inmates sent out to hobble into some convenient dry ditch to lie down and die, or to crawl into some barn or hovel, there to be tended, nor without fear of consequences, by some kindly man or woman who could not bear to see a suffering fellow-creature drop down and die at their own doorposts."

How all this fine organization of social work ended has often been a mystery to students of the social history of this time. It is not difficult to understand, however, when the happenings of the latter part of Columbus' Century are recalled. Sir Sidney Lee, in his "Stratford-on-Avon," has told the story of the end of things so far as Stratford is concerned. I prefer to let him tell the story (page 101):

"The politicians who surrounded Henry VIII and Edward VI found the destruction of religious corporations not more satisfactory to their consciences than to their purses. In 1545 and in 1547 commissioners came to Stratford to report upon the possessions and constitution of the Guild of the Holy Cross. The income was estimated at fifty pounds, one shilling, eleven pence halfpenny, of which twenty-one pounds, six shillings and eight pence was paid as salary to four chaplains. There was a clerk, who received four shillings a year; and Oliver Baker, who saw to the clock (outside the chapel), received thirteen shillings and four pence. 'Upon the premises was a free school, and William Dalam, the schoolmaster, had yearly for teaching ten pounds. 'There is also given yearly,' the report runs, 'to xxiiij poor men, brethren of the said guild, lxiijs:iijd; vz. xs. to be bestowed in coals, and the rest given in ready money; besides one house there called the Almshouse; and besides v. or vjli. given them of the good provision of the master of the same guild.'"

A typical instance of the way that wealthy men looked at their social duties during Columbus' Century is to be found in the case of Sir Hugh Clopton of Stratford-on-Avon. He was the Lord Mayor in 1492 and, having never married, he devoted his leisure and his wealth to philanthropy. Earlier in life he had made his fortune as a merchant in London. It was he who built New Place, which afterwards became Shakespeare's property. Just across the street stood the chapel of the guild and, as Sir Hugh was a prominent member when this edifice sadly needed restoration at the end of the fifteenth century, he provided for this. The chancel was left untouched, but the nave and tower as we have it were rebuilt by him. He died before the work was finished, but left enough money to secure its completion. It is a charming example of the perpendicular Gothic of the time and was decorated by elaborate paintings illustrating the history of the Holy Cross.

CHAPEL OF GUILD AT STRATFORD AND ALMHOUSES (RESTORED BY SIR HUGH CLOPTON, 1500)

These paintings were afterwards covered with whitewash, because the " reforming " spirit could not tolerate such representations, but in recent years some of them have been partly uncovered, disclosing how interestingly the work was done.

Still more interesting, and perhaps the present generation will consider it more practical, was Sir Hugh's rebuilding in solid stone of the old wooden bridge over the Avon at Stratford. It was constructed of free stone, with fourteen arches, and a long causeway also of stone, well walled on each side, was added to it. How much this was needed can be judged from what Leland the antiquary, who visited Stratford about 1530 on a tour through England, noted in his account of his journey as to the great value of this gift. " Afore the time of Hugh Clopton," he wrote, " there was but a poor bridge of timber, and no causeway to come to it, whereby many poor folks either refused to come to Stratford when the river was up, or coming thither stood in jeopardy of life." The bridge is still standing to convince us of the workmanlike thoroughness with which its foundations were laid.

SIR HUGH CLOPTON'S BRIDGE AT STRATFORD-ON-AVON

When Sir Hugh Clopton came to make his will, Stratford largely benefited in other ways, as Mr. Sidney Lee, to whom we owe most of these details, has noted in his "Stratford-on-Avon" (London: Seeley & Co., 1907, page 94):

"He bequeathed also C. marks to be given to xx. poor maidens of good name and fame dwelling in Stratford, i.e., to each of them five marks apiece at their marriage; and likewise Cl. to the poor householders in Stratford; as also Lli. to the new building, 'the cross aisle in the Parish Church there' (Dugdale). The testator did not, at the same time, forget the needs of the poor of London, or their hospitals; and on behalf of poor scholars at the Universities, he established six exhibitions at Cambridge and Oxford, each of the annual value of four pounds for five years." *

Sir Hugh Clopton's many benefactions illustrate very thoroughly the feeling of many of those who had made money at this time, that they were stewards of their wealth for the benefit of the community. Civic philanthropy is sometimes supposed to be a much more modern idea than this century, and what was given for charity is sometimes thought to have been but poorly directed. As a matter of fact, wealthy men were

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* It might possibly be thought that there were few opportunities for the making of fortunes of any significance in England at this time, and that therefore Sir Hugh Clopton's example would mean very little. As a matter of fact, however, this was the time when above all, fortunes were made rapidly and money flowed into England more than ever before. Taine in his "History of English Literature" quotes Acts of Parliament, the "Compendious Examination," by William Strafford, and other government documents which make this clear. He sums the situation up by saying:

"Towards the close of the fifteenth century, the impetus was given commerce and the woollen trade made a sudden advance, and such an enormous one that cornfields were changed into pasture lands, 'whereby the inhabitants of the said town (Manchester) have gotten and come into riches and wealthy livings' so that in 1553, forty thousand pieces of cloth were exported in English ships. It was already the England which we see to-day a land of meadows, green, intersected by hedgerows, crowded with cattle, abounding in ships, a manufacturing, opulent land, with a people of beef-eating toilers, who enrich it while they enrich themselves. They improved agriculture to such an extent, that in half a century the produce of an acre was doubled."

at least as thoughtful of their benefactions in that time as in our own. If Sir Hugh Clopton's varied works for his townspeople are to be considered as typical, and everything points to such a conclusion, they were even more likely to do enduring good. He did not specialize, but where he found a good work to do he did it. Indeed, the whole story of doing good for others in this time deserves the study of the modern time, because of its solution of many problems that we are facing now.

An interesting phase of their collections for charity was the continuance of the old custom which had existed for several centuries, of having a special day on which everyone who was approached by certain solicitors for charity was expected to give something. This was usually the day after Whit-Sunday. Sometimes in the English villages, at the entrance to a bridge, or across a market place or the main street of the town, a rope was stretched and everyone who passed had to pay a toll for charity. Our modern "tag day" was a revival of this custom, though in the mediæval towns, where everybody knew everybody else, there were less social dangers in the custom.

The Low Countries were very prosperous at this time and took up seriously the problem of helping the poor. As we have told more in detail in the chapter on "Hospitals and Care for the Insane," the order of Beguines took up the nursing and the visiting of the poor, and in many places the Beguinages assumed the character to some extent of institutions for the care of the poor. The word poorhouses has becomes so unfortunate in its connotations that one would scarcely think of using it in connection with these almost separate village-like communities, with abundance of air and light, in which the young women of the better classes took up their own life in small, neat, attractive houses and cared for the aged poor and children in little houses not far from their own. A great number of dependents were maintained mainly out of the revenues derived from the incomes which these young women of the better classes brought with them into the institution and from the funds contributed by friends who were interested in their good work. Our modern settlements are like them in certain ways, but there are so many differences in favor of the older institutions, which represent indeed an almost ideal way of exercising charity, that the contrast is striking.

Many of the religious orders that were doing such good work in Columbus' time have gone through many vicissitudes. Governments have often turned to enrich their favorites at the expense of charitable foundations in their hands, and it has been an easy way for politicians to get money. In spite of all this, some of them continue to do their work even at the present time. Among these the Beguines are particularly worthy of note. After the union of Holland and Belgium, at the beginning of the nineteenth century, William of Holland attempted to abrogate many of the rights of the Beguines and confiscate much of their property. The municipality of Ghent, in which the largest Beguinage was situated, sent a protest, in which they catalogued the great services of the order in times of war and epidemics, and the unfriendly purpose of the Holland Government was changed. In the nineteenth century the list of good works accomplished by the Beguines is very striking and some of them have been listed by Miss Nutting and Miss Dock in their "History of Nursing":

"In 1809-10 the Beguines of Belgium had devoted their whole strength to the service of the army during an epidemic of fever. During the war of 1813 their buildings were turned into hospitals, and after Waterloo they literally gave all they had to relieve the overwhelming distress. In 1832, 1849, and 1853 they again served nobly in cholera epidemics. Besides their readiness as nurses, they have likewise not been wanting as good citizens. In 1821 they contributed a generous sum toward the establishment of municipal industrial workshops, and have often acted as an aid society in dispensing contributions to sufferers from natural disasters, such as inundations and fires." That is a brief nineteenth-century chronicle of a charitable organization that was at an acme of its usefulness in Columbus' Century.

Such functions of helpfulness for those in need are now exercised by various organizations which are of comparatively recent date. Because these organizations are new, it is often supposed that the duties which they now fulfil were either quite unknown or almost entirely overlooked in the older time. It only requires a little study of the details of the social life and the organization of charity before the Reformation to appreciate how much was accomplished by the various religious orders. It has been so much the custom in English-speaking countries particularly to think that the religious were mainly occupied in their own little concerns, selfishly intent on the accumulation of means to enable them to live in idleness, that their real place in the life of the olden time has been almost entirely lost sight of. They represented the charitable organizations of all kinds that have come into prominence during this last few generations and that were so sadly needed. Their duties were accomplished by men and women who resigned all hope of profit for themselves and gave themselves entirely to these good works, thus obviating many of the abuses that are now beginning to be so manifest in charity organization.

The story of the establishment of the Monti di Pietà, lending institutions for the poor in Italy, is one of the most interesting chapters not alone in the social work of this period, but of all periods. The original suggestion for them came from that great scholar, preacher and worker for the good of the people, St. Bernardine of Siena, who died just before the opening of Columbus' Century. Their organization, however, we owe to Blessed Bernardine of Feltre, that worthy son of St. Francis of Assisi, who is generally represented in his pictures with that symbol of a Monte di Pietà, a little green hill composed of three mounds and on the top either a cross or a standard, with the inscription, "*Curam illius habe*" (Have the care of it). As thus established these institutions, the Monti di Pietà, were charitable lending houses, where the poor could obtain money readily for pledges and usually with very little cost to them beyond the repayment of the loan. At that time it was felt that charity might well care for the poor to this extent, and it was the custom for wealthy people who died to leave legacies by which unredeemed pledges of household necessaries might be restored to the poor without the repayment of the loan. Such legacies, by the way, are not unusual even yet in the Latin countries, and at least two have been chronicled within the year. The spirit of these institutions was excellent and they accomplished great good, spreading all over Italy and finding their way in some form into the Latin countries at least during Columbus' period.

St. Catherine of Genoa, whose work was done just about the beginning of Columbus' Century, is a typical example of the organizer of charity of this time. As a young widow she began to visit the patients in the hospital, and finally came to spend all of her time there, except such as was devoted to the visiting of the sick in their homes and the bringing of them into the hospitals. Soon she organized a number of others, or at least they gathered round her until a great work for charity was being done. Many of the noblewomen of the time devoted some hours at least every week to visiting the sick in the hospitals. There is a touching story told of Frances, Duchess of Brittany, who nursed through a severe illness her husband's successor on the ducal throne, who had treated her with great injustice. She afterwards retired to a Carmelite convent, where during an epidemic she nursed the stricken nuns through its whole course, and at the end of it laid down her own life. In the next century Evelyn, in his "Diary," tells of his surprise on visiting the hospitals in Paris to see how many noble persons, men and women, were waiting on them and "how decently and Christianly the sick in Charité [one of the great hospitals] were attended even to delicacy." This was only a continuation of the fine traditions of the older time, surprising to Evelyn because they had gone out entirely in Protestant England.

The period was particularly rich in social workers, especially those who used Christianity as the basis by which to enable men to help themselves. One of the greatest of these, whose influence so lives on even in our own time that Cardinal Newman loved to speak of him as his beloved Father Philip, was Philip Romolo Neri (1515-1595), better known as St. Philip Neri, the Apostle of Rome. He proved a rather brilliant scholar as a young man, but when a successful business career was opening up for him he gave it all up and in 1533 arrived in Rome without any money, without having informed his father of the step that he was taking and after having deliberately cut himself off from the patronage of an uncle who had resolved to make him his heir. For a while he tutored and wrote poetry and Latin and Italian, and then studied philosophy at the Sapienza and theology in the school of the Augustinians. When he was about thirty he became the close friend of St. Ignatius Loyola, and many of the young men that gathered round him, because of his attractive, amiable character, found a vocation for the intellectual and spiritual life in the infant Society of Jesus.

In 1548, together with his confessor, he founded the confraternity of the Most Holy Trinity for the care of pilgrims and convalescents in Rome. Its members met for communion once a month and there was exposition of the Blessed Sacrament, a practice which was introduced by Philip. He sometimes preached even as a layman, and in 1551, at the command of his confessor, for nothing short of this would have overcome his humility, he entered the priesthood. He devoted his attention particularly to men and boys and succeeded in making them close personal friends. In the midst of this work priests gathered round him, and finally Gregory XIII recognized the little community as the Congregation of the Oratory. Pope Gregory XIV, who had previously been a great personal friend of Philip's, would have made him a cardinal only for the saint's great reluctance.

His little band of oratorians, among whom the most conspicuous was Baronius, the Church historian, did wonderful work in Rome and many other houses of this congregation came into existence. Few men that ever lived had so much influence over all those who came in contact with him as St. Philip Neri, and it is this personal influence that characterized the work of his congregation in the after-time. Newman and Faber and many of the distinguished converts of the Tractarian movement in England became members of the Oratory, and St. Philip's work has come down to our generation through them with very wonderful success. His career represents another example of the marvellous power of the men of this time to create things of all kinds which influence all succeeding generations.

St. Philip Neri's contemporary and intimate friend, St. Ignatius Loyola, the founder of the Jesuits, is always thought of as a great organizer in education, seldom as a social worker. There was no phase of social need in Rome, however, to which he did not give his personal attention in spite of the many calls that there were on his time. He taught little children catechism and insisted that this should be a special feature of the work of his order in spite of its devotion to the higher education. He organized various institutions for the poor and secured by his efforts the foundation of a home for fallen women in Rome and himself personally conducted through the streets to it some of those who were to enter. His example in this matter must be taken as a type of what many thoughtful persons of this time were ready to do in the accomplishment of what they saw as their social duties.

One of the great social reformers of the time whose unfortunate death has made him the subject of wide attention ever since was Savonarola, the Dominican monk, whose fate has been a sad stumbling-block of misunderstanding of the time. He used his great powers of oratory to bring about a social reform. It was sadly needed. Contact with the old pagan ideas through the new learning had made many of the people of the time even more selfish than usual. In the midst of the luxury and worldly interests of the time there had come a neglect of the old fellow-feeling of kindness and of charity that had characterized the Middle Ages. This affected mainly the so-called better classes. It was this, above all, that Savonarola tried to reform. He succeeded in stirring up the people wonderfully, and it is probable that no one has ever succeeded in working such a revolution in the social feelings of a whole city as Savonarola did.

As a consequence of his ardent appeals people began a great reformation of city life by reforming themselves. The confessionals were thronged with penitents, the audiences outgrew the capacity of the largest church in Florence, that city of ample churches, and the very streets that had listened to nothing but pagan poetry for years resounded to the music of hymns and psalms. A really important step in reform, however, was the great change in the attitude of mind of men towards others, and especially those needy or in suffering. Men sold their goods and gave the proceeds to the poor. Women gathered together their vanities of all kinds, burned them in the market place and devoted themselves to the care of the ailing. Old feuds were made up, and thoughts of revenge put aside, though they had been the dearest traditions in families for generations. For some time there was probably never a happier community than Florence. No one was in want, selfishness was almost at an end and lawlessness quite unknown. The conditions were too good to last among ordinary humanity. Political bickering began and political factors of all kinds obtruded themselves on the movement. The citizens formed themselves into a Christian commonwealth, over which they wished Savonarola to rule. After a time, intoxicated by the apparent success of the movement, not a few hoped to raise themselves to power in the midst of the rather quixotic political conditions that had developed, and almost needless to say they were urged on by certain of the ruling princes of Italy, who hoped themselves to benefit by conditions in Florence.

Long ago Horace said, " You may put away nature as with a fork, but she will come back." The supernatural ruled for a time in Florence, but the natural reasserted itself and then the trouble began. Savonarola was its victim, but not before he had shown clearly what the evils of the time were and pointed out the path along which they might be reformed, though the sudden reformation of them could not be hoped for.

Savonarola was a social, and not a religious, reformer. He has often been proclaimed a pre-Reformation reformer, but there was no doctrine of the old Church that Savonarola did not accept, and it was for political and not theological reasons that he was put to death, though ecclesiastics had so much to do with it. All the characteristic doctrines of the Church—devotion to the Saints and to the Blessed Virgin, the Blessed Sacrament, Transubstantiation—are dwelt on in his writings, and he is even the author of a hymn to the Blessed Virgin and of a treatise on devotion to her. Nor was he at all carried away with the idea of self-judgment and independence in religion. No one teaches more emphatically than he the power of the Pope and the necessity for obedience to Rome. Nothing stronger or more explicit in this regard has ever been written than some passages that have been found in his writings.

It is too bad that his great social influence for good was not allowed to work itself out into important social reforms. Great churchmen of the after-time have recognized the sad misfortune of his death, and Pope Benedict XIV, whose authority in the matter of the canonization of Saints and the honor to be paid them is the highest, made use of an expression which shows in what lofty veneration Savonarola was held by one of the greatest of the popes. As Cardinal Lambertini, Pope Benedict said: "If God gives me the grace to get to Heaven, as soon as I shall have consoled myself with the Beatific Vision my curiosity will lead me to look for Savonarola." Half a century later a parallel expression, which is almost more striking, was reported to have been used by Pope Pius VII, who said: "In Heaven three serious questions will be solved: The Immaculate Conception, the suppression of the Society of Jesus and the death of Savonarola." *

As a matter of fact, all the sentiment of the great Catholic scholars and historians of modern times has been intent on vindicating Savonarola's character. It is not the Church but churchmen who condemned him and not for religious but political reasons. Unfortunately in English the general impression with regard to him is derived from George Eliot's "Romola," and that distinguished English novelist, in spite of her erudition, was least of all fitted by temperament or

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* How soon this vindication of Savonarola began to be felt in the minds of high ecclesiastics will perhaps be best realized from the fact that when, some ten years after the friar's death, Raphael was asked to decorate the stanze of the Vatican, he introduced Savonarola beside St. Thomas Aquinas, among the great doctors of the Church in the very first fresco that he painted. This fresco was seen and studied carefully by the Pope and greatly praised by him. Almost needless to say Raphael's action in the matter would never have been permitted, only that the reaction in favor of Savonarola had set in very strongly.

intellectual training and eminently unfitted because of her religious ideas to write the life of Savonarola and his relation to his time. No one saw the social abuses so well as he and no one called attention to them so effectively. He recognized them as abuses, however, and not in any sense as consequences of the religious system. He would have been the last one in the world to have wished for serious disturbance of the Church. He had for years held high positions in the Dominican order and was in the most complete sympathy with the religious orders and the hierarchy of his time.

One of the greatest of the social workers of this century is undoubtedly Bartolomé de Las Casas, who did so much to moderate the abuses in the treatment of the Indians, which had unfortunately crept in under the Spanish sovereignty in the early days. He was the son of Francisco Casas, who had accompanied Columbus on his second voyage and brought back an Indian boy, whom he left to his son as a servant. Bartolomé studied law at Salamanca, secured a high reputation as a lawyer and then became the counsel to the Spanish governors of the Antilles and later of the Island of Hispaniola. After some years of successful legal practice Las Casas became a priest and devoted himself to the alleviation of the condition of the Indians. In becoming a priest his position as a reformer became assured. Strange as that may seem to some who do not understand the period, he gained almost complete freedom of speech and, having no solicitude for his material needs, could devote all his time and energy untrammelled to his chosen life work. He made mistakes, he was eminently unpractical, but there is no doubt at all about his absolute devotion to the cause of humanity and his untiring activity and zeal in the cause of proper Christian treatment of the Indians. He aroused the attention of the men of his time and, above all, of the sovereigns of Spain and the most influential men and women of that country.

His crusade had much to do with the promulgation of the "New Laws" in 1542 and their amendments in 1543 and 1544. These did not abolish serfdom, but they greatly limited it, so that it was even said that a native enjoyed more privileges than a creole. He refused the bishopric of Cuzco in Peru declaring that he would never accept any Church dignity, and it was only after much urging that he consented to become bishop of Chiapas in Southern Mexico. His powers of administration did not prove as great as his humanitarian ideals and, while he talked much of abuses, he was not able to correct them as well as many others who did not set out to be so radical as he. He has written much and his books have appeared in many editions. His was a great soul that found a supreme purpose and devoted to it a long life of ninety years. A less ardent advocate than he would almost surely have failed of accomplishing the great reform that was needed. Like our own Abolitionists, he was too radical in many of his views, and yet his very enthusiasm carried others along into the execution of great good. His writings have been a storehouse of information with regard to conditions in the colonies and, while they have to be discounted from the standpoint of his tendency to exaggeration of interest in the Indian questions, that exaggeration is justified to a great extent by the great humanitarian purpose that dictated it. Las Casas must undoubtedly be considered one of the world's great philanthropists.

An important social influence, if the name of social reformer does not quite suit him, was the Duke of Gandia, who is better known as St. Francis Borgia. He was a great-grandson of Pope Alexander VI, and his grandfather, Juan Borgia, who had acquired the hereditary Duchy of Gandia in the kingdom of Valentia in Spain, was assassinated by an unknown hand, possibly that of his brother, Cæsar Borgia. On the maternal side the Duke of Gandia was the great-grandson of Ferdinand the Catholic. His grandfather had been the Archbishop of Saragossa. He himself became a brilliant courtier at the Court of Charles V, and in the absence of the Emperor was considered the head of the Imperial household. He and his wife were the favorites of the Empress. After the death of the Empress he was commissioned to convey her remains to Granada and, having to identify them formally there before burial, was shocked on the opening of the coffin at the change which a few days of death had brought in the sovereign whom he had served so zealously. He turned to make his life mean something, not for passing honor but for the good of others. In fulfilment of this purpose he joined the Jesuits and eventually became the third General of the order. His change of life attracted wide attention and did almost more than anything else to lessen many selfish tendencies among the nobility of the time due to the pagan spirit of the Renaissance. It was a social reform that made the Borgian name as much of an inspiration for good as it had been for ill.

Perhaps even more important for this period is what may be called the negative side of its social history. Apparently a great many people are quite convinced that the later Middle Ages and the Renaissance were witnesses of many severe cruelties and torturing practices, some of them legal, which reveal, if not an actual barbarity, a sad, almost inhuman, lack of kindliness and fellow-feeling on the part of the men and women of this time. Most people who have heard of cruelties and torture are quite sure that in general these reached their climax of bitterness in the later Middle Ages and that even the Renaissance time was not free from them. In the more recent centuries, particularly the seventeenth, eighteenth and ninteenth, men are supposed to be climbing out of the slough of despond in this matter into which humanity unfortunately had sunk during the mediæval period. We rather pride ourselves on this evolution of humanity, quite forgetting for the moment how much greater than all the old-time barbarity is the suffering incident to our industrial development. This is, however, set down to inadvertence at most, while mediæval and Renaissance cruelty is thought of as deliberate.

There are not many impressions more false than this in history, and it is entirely due to the ignorance of the date of a number of historical events which are sometimes massed together as mediæval or at least not modern, modern history being supposed to begin as a rule with the discovery of America. As a matter of fact, the refinements of torture all came after Columbus' Century. The Virgin of Nuremberg, the iron boots into which wedges were driven for torture purposes, the iron gauntlets in which the hands of living people were roasted and many other of the hideous contrivances that rightly find a prominent place in history were made in the later sixteenth and seventeenth centuries, and not in Columbus' time nor during the mediæval period. The worst refinements of legal torture nearly all were devised in the course of the witchcraft delusion which swept over Europe in the later sixteenth and during the seventeenth century. There was comparatively little witch baiting and witch hunting and very few witches put to death during the earlier centuries. Witchcraft was a post-Reformation delusion.

The Encyclopedia Britannica (Ninth Edition), in its article on torture, emphasizes particularly the fact that: "It is the boast of the common law of England that it never recognized torture as legal. Instances of torture as a means of obtaining evidence were invariably ordered by the Crown or Council, or by some tribunal of extraordinary authority such as the Star Chamber, not professing to be bound by the rules of the common law." "The infliction of torture became more common under the Tudor monarchs," this article continues. "Under Henry VIII it appears to have been in frequent use." May I add that its frequency is an incident of the end of his reign after the religious difficulties began. "Only two cases are recorded under Edward VI and eight under Mary. The reign of Elizabeth was its culminating point. In the words of Hallam, 'the rack stood seldom idle in the tower for all the latter part of Elizabeth's reign.' The varieties of torture used at this period are fully described by Lingard, and consisted of the rack, the scavenger's daughter, the iron gauntlets or bilboes, and the cell called 'little ease.' The registers of the council during the Tudor and early Stuart reigns are full of entries as to the use of torture, both for state and for ordinary offences."

Under Elizabeth and the Stuarts, and even later, there were cases fully recognized by the English common law which differed from torture only in name. To quote the Encyclopedia Britannica again:

"The *peine forte et dure* was a notable example of this. If a prisoner stood mute of malice instead of pleading, he was condemned to the *peine,* that is, to be stretched upon his back and to have iron laid upon him as much as he could bear, and more, and so to continue, fed upon bad bread and stagnant water through alternate days until he pleaded or died. It was abolished by George III, and George IV enacted that a plea of 'not guilty' should be entered for a prisoner so standing mute. A case of *peine* occurred as lately as 1726. At times tying the thumbs with whipcords was used instead of the *peine.* This was said to be a common practice at the Old Bailey up to the last century. In trials for witchcraft the legal proceedings often partook of the nature of the torture, as in the throwing of the reputed witch into a pond to see whether she would sink or swim, in drawing her blood, and in thrusting pins into the body to try to find the insensible spot. Confessions, too, appear to have been often extorted by actual torture, and torture of an unusual nature, as the devil was supposed to protect his votaries from the effects of ordinary torture."

The seventeenth century particularly witnessed the deaths of many thousands of poor people who were thought to be witches. Persecutions for witchcraft took place more particularly in the countries most affected by the Reformation. Germany as well as England had many of them. Even the cruelest forms of torture were invented with almost devilish ingenuity at this time. It was under the influence of this delusional psychic contagion and the dread of possession by the devil that the insane and sufferers from nervous diseases of all kinds came to be treated more inhumanly than ever before. A climax of inhumanity in their regard was reached in the eighteenth century, when manacles and chains and dungeons were employed, until at last the exaggeration of ill-treatment brought with it reaction and reform.

Humanitarianism shows a decline, marked and definite and progressive from the end of the sixteenth until the end of the eighteenth century. Interest in religion sank as in England until John Wesley came to put a new spirit into it. The rights of men were less and less respected and the poor were oppressed by those above them until the awful conditions that developed in the *ancien régime* came in France, and nearly similar conditions in other countries. The French Revolution had to come. Men could stand no more. As Hilaire Belloc, one of the best of the modern historians of the French Revolution, says, " That movement was really an attempt to restore to men the rights which they had enjoyed during the Middle Ages."

CHAPTER II

HOSPITALS, NURSING AND CARE FOR THE INSANE

An excellent criterion of the social status of any period in history is the genuine humanitarian purpose that animates it, and how seriously it takes the duty of caring for those who most need care is to be found in the character of its hospital buildings and their maintenance. Tried by this standard, Columbus' Century proves to be one of the greatest of the centuries of history. This will seem very surprising to most people, because the general impression has been that until our generation hospitals were rather ugly buildings of institutional type, with small windows, sordid surroundings and very unsuitable internal arrangements for the ailing. There is no doubt at all that hospital buildings just before our generation—and some of them unfortunately remain over as living witnesses—were all that has been thus suggested and if possible worse. Indeed, some of the hospital buildings of two generations ago were about as unsuitable for their purpose as could well be imagined. The general feeling with regard to this fact, however, is not so much one of blame as of pity. Most people assume that the older generations did not know how to build good hospitals. They did as well as they could, but until the development of modern knowledge of hygiene and sanitation, as well as the demand made on hospital administration by modern surgery, hospitals could scarcely be expected to be anything but the sordid piles of buildings they usually were, thought proper if they but furnished a protection from the weather and sustenance for the sick poor.

Anyone who will consult the real history of hospitals, however, will be surprised to find that the worst hospitals in the world's history were built in the first half of the nineteenth century. The usual impression is that, if the hospitals of a century ago were so bad, those of the century preceding that must have been much worse and so on progressively more unsuitable until in the Middle Ages they must have been unspeakable. As a matter of fact, the hospitals of the thirteenth and fourteenth centuries were beautiful buildings as a rule, quite as charming structures for their purposes as all the other architecture of that time—churches, monasteries, abbeys, castles, town halls and the rest. They had at this time a period of wonderful surgical practice, of which we have learned from the republication of their text-books of surgery only in recent years, and there is a definite, direct ratio between surgery and proper hospital organization. Whenever there is good surgery there are good hospitals, and whenever there are good hospitals, surgery will be found occupying a prominent, progressive place in the history of medicine.

It is hard to understand the periods of decadence in hospital construction and maintenance and in nursing care and training, but not more difficult than to understand the ups and downs of surgery. That anæsthesia and antiseptic practice should obtain for a while and then gradually be lost is no harder to understand than that hospitals should gradually "sink to an almost indescribable level of degradation." Miss Nutting and Miss Dock, in their "History of Nursing," have described the century from 1750 to 1850 as "The Dark Period of Nursing."

They quote Jacobsohn, the well-known German writer about care for the ailing, who says "that it is a remarkable fact that attention to the well-being of the sick, improvements in hospitals and institutions generally and to details of nursing care, had a period of complete and lasting stagnation after the middle of the seventeenth century, or from the close of the Thirty Years' War. Neither officials nor physicians took any interest in the elevation of the nursing or in improving the conditions of hospitals. During the first two-thirds of the eighteenth century he proceeds to say nothing was done to bring either construction or nursing to a better state. Solely among the religious orders did nursing remain an interest and some remnants of technique survive. The result was that in this period the general level of nursing fell far below that of earlier periods. The hospitals of cities were like prisons, with bare, undecorated walls and little dark rooms, small windows where no sun could enter, and dismal wards where fifty or one hundred patients were crowded together, deprived of all comforts and even of necessities. In the municipal and state institutions of this period, the beautiful gardens, roomy halls and springs of water of the old cloister hospital of the Middle Ages were not heard of, still less the comforts of their friendly interiors."

It so happens that just about the beginning of Columbus' Century there was a great new development of hospital building. This was only what might have been expected, for a wonderful new period of architecture was just beginning and buildings of all kinds were being erected with a magnificence that has made them the admiration of the world ever since. Handsome basilicas, Renaissance palaces, town halls were being executed by the architects of the time so as to make them precious monuments for future generations. Hospitals came in for their share of this renewal of architectural interest, and a series of really beautiful hospital buildings were erected which we have come to admire very much since we ourselves have wakened up to the duty of building fine hospitals. The old municipalities felt that buildings erected for the poorer citizens must not be planned with the idea that anything was good enough for the poor, but must be suitable to the dignity of the city.

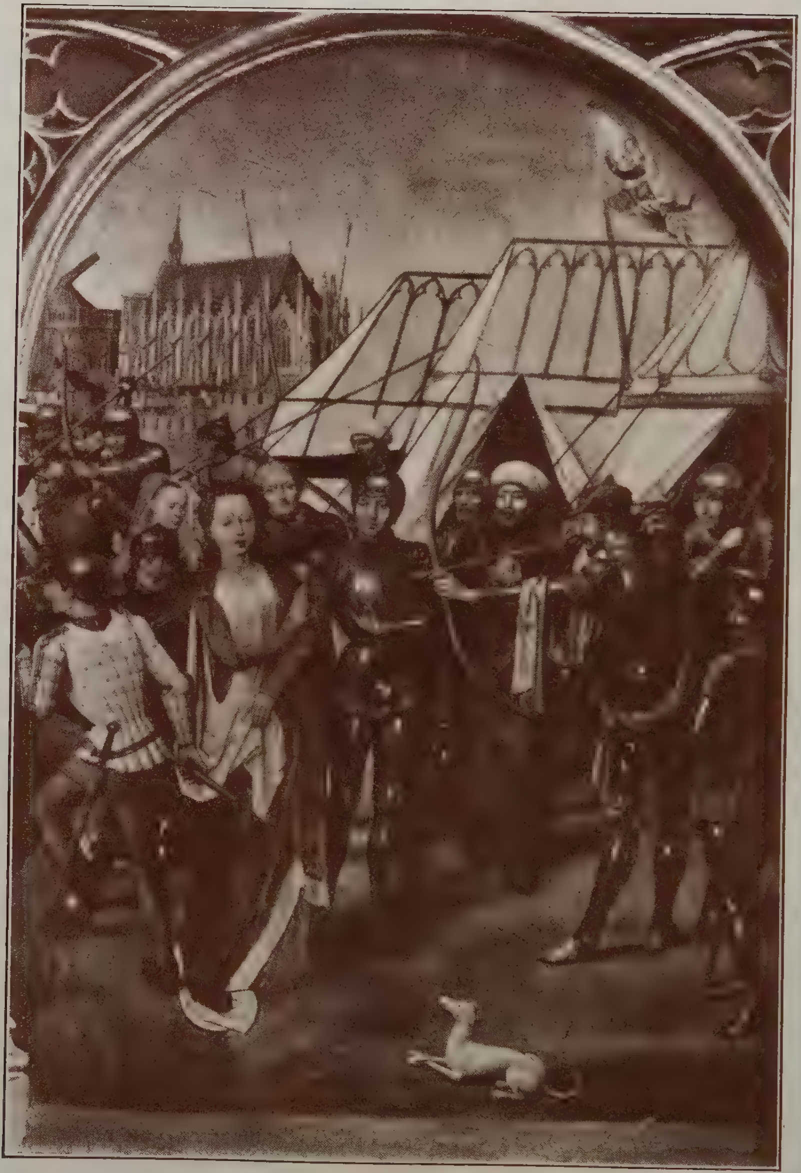
One of the most beautiful hospitals of this time is the famous *Ospedale Santa Maria degli Innocenti,* which has been called the finest and most interesting foundling asylum in the world. It was built under the patronage of the guild of silk merchants in the early part of the fifteenth century, being completed in 1451, and is a model of charming architecture, decorated with fine paintings and adorned with the well-known della Robbia blue medallions. The Italians did not, however, call it—as in our ruder Northern ways is our custom—a foundling asylum, thus stamping the tragedy of their existence on the children, but the Home of Innocents. Surely they were the innocent victims of the conditions which had brought about their abandonment by their parents. The children were kept until the age of seven, and then they were placed about with families who promised to treat them as their own children. The boys were taught trades; the girls, trained in all domestic occupations, were, when married, given dowries by the hospital or the foster parents, or received into convents if they so wished. As showing how the spirit that organized it in Columbus' Century lives on, we may quote what Miss Nutting and Miss Dock say with regard to the hospital in their "History of Nursing" (p. 243):

BRAMANTE, GREAT COURT OF HOSPITAL (MILAN)

"To-day this richly historic house is in charge of the Sisters of St. Vincent de Paul, under the direction of a highly scientific and progressive council chiefly consisting of medical men, and is one of the most perfectly kept and well managed institutions of the kind in existence, its union of mediæval charm with modern science being a congenial and happy one."

Other hospitals in Florence are scarcely less interesting. The hospital where Romola went to nurse her patients is still in existence, but is no longer a hospital. It is now the very interesting Accademia dei Belli Arti. One of the beautiful hospitals erected at this time which may serve as a type of the buildings erected for hospital purposes is the great Ospedale Maggiore of Milan. Important portions of this were finished during Columbus' Century. One of its courts is so beautiful that it has been attributed to Michelangelo, though it seems more probable that it was due to that almost equally great architectural genius, Bramante. The famous Santo Spirito Hospital in the Borgo at Rome was rebuilt by Sixtus IV in the first half of Columbus' Century and had many of the characteristics of the best architecture of the time. Practically every city in Italy did some really fine hospital building at this time. Naples and Venice added to their beautiful mediæval hospitals and everywhere there was high development of humanitarian purpose in this regard.

Italy, however, was not the only country of Europe to have fine hospitals. Indeed, every country had a share in this, and wherever there was a flourishing period of architectural evolution hospitals came in for their share of the development. In the Low Countries and Northeastern France, where a series of beautiful cathedrals and churches were being rebuilt or newly erected, and above all where the magnificent town halls that have been such a subject for admiration ever since were being erected, hospitals received great attention. Not only were fine buildings erected, but a magnificent organization of nursing and care for the ailing occurred. There was great prosperity among the people, they were doing the trade of the world, they were democratic in their ideas and they felt that the dignity of the municipalities required worthy care



MEMLING, MARTYRDOM OF ST. URSULA (BRUGES, HOSPITAL OF ST. JEAN) for the citizens no matter how poor they might be. Above all, some of our own ideas in hospitals developed among them and many of the wealthy came to realize that they could be better cared for in the efficient hands of trained attendants in properly arranged hospital quarters than in their own homes. There was not that dread of hospitals which develops whenever they are exclusively for the poor—and deservedly, because the patients are inevitably the subject of many abuses.

That picturesque Belgian community, the Beguines, had charge of a number of hospitals at this time which became famous for their thorough organization and maintenance on a high level of efficiency. One of these was founded at Beaune by Nicolas Rolin, chancellor of the Duke of Burgundy, just about the beginning of Columbus' Century. Miss Nutting and Miss Dock, in their "History of Nursing," have given a description (p. 269) of this, as well as some of the details of the nursing and management mainly taken from Helyot's "History of the Religious Orders":

"It was built with much magnificence, with long wards extending into a chapel, so that the sick could hear the services, and opening into square courts with galleries above and below. Patients of both sexes and of all ranks and degrees were received, both rich and poor. There was one ward for those most seriously ill, and back of all a building for the dead, with 'many lavatories and stone tables.' In the upper galleries were suites of apartments for wealthy patients, and the gentlefolk came from leagues around. The suites consisted of a bedroom, dressing-room, anteroom and cabinet. They were richly furnished, and each patient had three beds, that he might move from one to another. Each apartment had its own linen, utensils and furniture, 'and borrowed nothing from any other.' The suites and wards were named after the King, royal family, dukes of Burgundy, and other prominent personages. In the middle wards patients of the middle class were received, and in the lower galleries the poor. The rich patients had their own food and wine sent to them, and paid for their medicines, but the rooms and the sisters' services were free. Few, however, left without bestowing a gift. The poor were cared for without any cost, but if they wanted anything special they had to buy it. A little river ran through the court and was carried in canals past the different departments for drainage. It was noted that the hospital had no bad odors, such as were found in so many others, but was sweet and clean."

The conditions in these hospitals of Columbus' Century were so much better than we have had any idea of until recent historical studies revealed them to us, and so many people have somehow become persuaded that hospitals of the olden time were without proper provision for the care of the sick, such as we have elaborated again in our time, that descriptions of other hospitals seem necessary to make the hospital organization of the time clear. Miss Nutting and Miss Dock declare that " the hospital at Châlons sur Saône was also very magnificent, and there, too, there were no bad odors, but in winter delicate perfumes and in summer baskets of growing plants hung from the ceiling. It had a large garden with a stream running through it with little bridges over it." It is easy to understand what a charming place for convalescents and what a pleasant view for patients could be made out of such surroundings. There is no doubt that they were well taken advantage of, for this is the time of the beautiful Renaissance gardens, when everywhere natural beauty was cultivated to a good purpose.

Helyot, in his *"Les Ordres Monastiques,"* describes the beautiful drug rooms in these hospitals, where the various medicaments were prepared, many of them being grown in the hospital garden, and also the other rooms of the hospital, the quarters for the nursing sisters, and says that " the patients were nursed with all the skill and goodness of heart and refinement that might be expected from the conditions surrounding them." He appreciated very well that proper quarters for patients and nurses make strongly for such nursing conditions as are sure to be of the greatest possible help in the care of diseases.

A special nursing order of Beguines was formed at this time, and as these religious women were recruited as a rule from the better classes of the population, bringing in with them such dowries as would enable them to support themselves in whatever work they might undertake, it is easy to understand on what a high plane the nursing must have been. It would remind one of the conditions in the early days of the trained nurse in modern times, when so many of the applicants for nursing positions were prepared by their family life at home for devotion to a liberal profession rather than merely the taking up of an occupation necessary for livelihood.

How their efforts were appreciated by patients will be very well understood from what may still be seen at the hospital of St. Jean at Bruges. The great painter Memling was for a time a patient in the hospital. He felt that he owed his life to the good sisters who had done so much for him, and so he painted a great altar-piece for them and decorated the famous Shrine of St. Ursula. The pictures were painted just about the time that Columbus discovered America. They are among the most beautiful examples of religious painting ever made. The decorations of the shrine particularly are among the world's great works of art. They are almost miniatures and contain large numbers of faces, beautifully executed, but every detail has been worked out by the great painter, evidently as a labor of love. The texture of some of the garments as he reproduces them has proved a source of wonder to artist visitors ever since. Many thousands of visitors find their way to the hospital every year, and even the small sum of money (twenty cents) which is charged for admission to see them constitutes in the annual aggregate an income of thousands of dollars. The hospital, which is very spacious and has large gardens with the canal winding alongside of it, is enabled to carry on its work much better as a consequence of this notable addition to its revenues due to the gratitude of a patient of over four hundred years ago.

Many of these hospitals had beautiful decorations. They understood very well at that time that patients' minds must be occupied if they are to be saved from the depressing effect of too much thinking about themselves, and they felt that staring at bare walls was not conducive to diversion of mind. In many of these hospitals then there were beautifully decorated walls and great pictures in the corridors. As these were painted directly on the wall, as a rule they did not collect dust nor present opportunities for dirt to gather.

Helyot has insisted on the ample water supply that they made it a rule to secure for these old-time hospitals. It was felt that the plentiful use of water was absolutely essential for maintaining healthy conditions in hospital work. In our modern time we have come more and more to realize that, while antiseptics are of great value once infection has taken place and dirt has found an entrance, soap and hot water are the best possible materials, especially when frequently applied, to maintain sanitary conditions.

Many of the habits worn by the religious who were devoted to nursing had certain features that made them much more hygienic for patients than ordinary feminine dress. As a rule, they were very simple, often made of washable materials, the head was always covered and spotless white was worn around the shoulders and at the wrist. This was sufficient of itself to keep constantly in mind the necessity for scrupulous cleanliness. Dirt showed very readily. When the nurses, or at least those who had the main duties to perform, came of refined families and wore these habits there could have been no neglect of cleanliness.

The best possible evidence for the proper appreciation of the place of hospitals in life at this time is to be found in Sir Thomas More's account of the hospitals in Utopia. It must not be forgotten that he was travelling in Flanders when he wrote it. He pictures the people of his ideal republic as possessed of fine large hospital buildings, providing ample accommodations so that even in times of epidemic there need be no danger of contagion and abundantly supplied with all that is necessary for the care of the ailing. The standard was not what was good enough for the ailing poor, but what was worthy of the dignity of the city caring for its citizens. The proof of the completeness of their arrangements for the care of patients is to be found in the added declaration that practically everyone who was sick preferred to go to the hospital rather than to be cared for at home. This is the condition of affairs which is now developing among us again, after a long interval, during which hospitals were the dread of the poor and the detestation of those who had to go to them. The whole passage is extremely interesting for this reason:

"But they take more care of their sick than of any others; these are lodged and provided for in public hospitals. They have belonging to every town four hospitals, that are built without their walls and are so large that they may pass for little towns; by this means, if they had ever such a number of sick persons, they could lodge them conveniently, and at such a distance that such of them as are sick from infectious diseases may be kept so far from the rest that there can be no danger of contagion. The hospitals are furnished and stored with all things that are convenient for the ease and recovery of the sick; and those that are put in them are looked after with such tender and watchful care, and are so constantly attended by their skilful physicians, that as none is sent to them against their will, so there is scarce one in a whole town that, if he should fall ill, would not choose rather to go thither than lie sick at hom[illegible]

The spirit of the century and its [illegible]er of organization of charity and good works is well expressed by the foundation of the Brothers of Mercy in Spain, in 1538, by a Portuguese soldier who had been wounded in battle, as was not infrequent in those days, and vowed to devote his life to God if he recovered. He rented a small house in Granada, where he gathered together a number of sick people and nursed them with the greatest care. In order to support them he went through the streets in the evening with a basket begging for his patients. After a time others came and joined him in his good work. Alms boxes were placed here and there through the city to remind people of the help that was needed. Gradually the scope of their work increased, they were given charge of hospitals, they visited the sick at their homes and the order spread not only over Europe but throughout the Spanish-American countries on this continent. Within a hundred years after the foundation the annual number of patients under their care was said to have been some two hundred thousand. A number of houses of the order was founded in Italy, and over their alms boxes down there the sign was, *Fate bene, fratelli*" (Do good, little brothers). From this sign they came to be known as the *Fate Bene Fratelli,* the Do Good Little Brothers.

medieval

The proper care of the insane is usually looked upon as a very modern phase of humanitarian evolution. Most people think that until the last hundred years the insane have been hideously neglected, when not treated with absolute barbarity, and that the rule has been simply to put them away so that they could not injure themselves or others, confining, manacling, and otherwise hampering their activities, regardless of their health or the mental effect on them. In this once more, as in most of the historical ideas with regard to humanitarian development, the erroneous notions are due to the fact that the care for the insane was at its lowest point during the eighteenth and the early part of the nineteenth century, and that there has been a magnificent improvement since, though it must not be forgotten that there has not been a single generation since when there have not been very serious complaints deservedly uttered of awful neglect of the insane in some part of the civilized world. We have had revelations with regard to the care of the insane in the country districts of even our Eastern States which have been almost incredible. The conditions that we have come to learn as existing in the South in the care of the insane, which have been brought to light by the recent investigation of pellagra, have been of a similar character. The epithet mediæval which is applied so often to these conditions is absolutely unwarranted by our present knowledge of old-time care of the insane.

It has been concluded that, since care for the insane was so neglected in the eighteenth century, it must have been almost infinitely worse in preceding centuries. The same fallacy lies at the root of a great many false impressions with regard to mediæval and Renaissance history. The eighteenth was the lowest of centuries in art, literature, education, and humanitarian purpose. The preceding centuries exhibit some very interesting developments of care for the insane, some of which anticipate our most modern ideas. At Gheel in

Belgium, from the earlier Middle Ages, they cared for defectives on the village plan. Similar institutions were not infrequent. They developed the "open door" system of caring for the insane and insane institutions were mainly in connection with monasteries, well out in the country, and under good conditions, since they were never crowded. It is always crowding that brings serious abuses with it and leads to what seems to be barbarity, but is really an inability to cope with the large problem with inadequate means.

It so happened that just before the beginning of Columbus' Century there was a special development of care for the insane and the opening of a series of hospitals that represent an epoch in the history of care for these poor people. The most important part of this development of the fifteenth century occurred in Spain. Asylums were founded at Valencia, Saragossa, Seville, Valladolid and Toledo. This movement has sometimes been attributed to Moorish or Mohammedan influence, but even Lecky, in his "History of European Morals," has rejected these assertions which are absolutely without proof. Spain continued to be the country in which lunatics were best cared for in Europe down to the beginning of the nineteenth century. Pinel, the great French psychiatrist who struck the manacles from the insane of France, declared Spain to be the country in which lunatics were treated with most wisdom and most humanity. In his book on "Mental Alienation" he gives some details of the treatment which show a very modern recognition of the need to be gentle and careful of the insane rather than harsh and forceful.

In England a rather important development of care for the insane occurred during this century in connection with Bedlam Hospital, London. This, originally founded as a home for the suffering poor, as its name Bethlehem (house of bread) implies, whether they had any specific ailment or not, came after a time to be a hospital, and then as a further development confined its care to the insane. Tyndale is the first to use the word Bedlam as meaning a madhouse or a madman, so that the conversion had evidently taken place in his time. One very interesting custom developed which serves to show the mode of treatment practised. A "bedlam" came to signify one who had been discharged from this hospital with the license to beg. After recovery from their acute conditions the insane were allowed to go out on condition, if there was no one to care for them, that they wore a tin plate on their arms as a badge to indicate that they had been for a time in the asylum. This tin plate aroused the sympathy of those they met and they were helped in various ways by the people of the time. Besides, it served as a warning that, since such people had been for a time in the asylum, they were not to be irritated nor treated quite as other folk, but on the contrary to be cared for. They were known as bedlamers, bedlamites or bedlam beggars. They were treated so well that tramps and other beggars of various descriptions obtained possession of badges and abused the confidence of the public.

After Henry VIII's time Bedlam, which had been a religious institution, passed under the care of the state, and from this time on the story of abuses of all kinds is repeated at successive investigations in every other generation. Evelyn, in his "Diary of 1656," notes that he saw several poor creatures in Bedlam in chains. In the eighteenth century it became the custom for those seeking diversion and entertainment to visit Bedlam and observe the antics of the insane patients as a mode of amusement. This was done particularly by the nobility and their friends. A penny was charged for admission into the hospital, and there is a tradition that at one time an annual income of £400 accrued from this source. This would mean that one hundred thousand people had visited the hospital in the course of a year. Some of Hogarth's pictures show the hospital being visited in this way by fashionable ladies.

In Rome the Popes, recognizing the superiority of the care for the insane as practised in Spain and in Navarre, opened a Pazzarella at Rome in the sixteenth century under the care of three Navarrese. This hospital for the insane "received crazed persons of whatever nation they be and care is taken to restore them to their right mind; but if the madness prove incurable they are kept during life and have food and raiment necessary to the condition they are in." Evidently they looked for improvement in many cases and expected to allow the patients to leave the asylum at least for a time, though if their alienation continued they were kept. Just about the end of Columbus' Century a Venetian lady of wealth, evidently attracted by the kind of care given the insane, " was moved to such great pity of these poor creatures upon sight of them that she left them heirs to her whole estate. This enabled the management with the approbation of Pope Pius IV to open a new house."

It is after the sixteenth century that decadence in the care of the insane becomes very marked. This reached its climax, as might well be expected, just about the same time that hospitals and care for the ailing reached their lowest ebb of efficiency. Burdett, in his " Hospitals and Asylums of the World," London, 1901, gives his third chapter the title, " The Period of Brutal Suppression in Treatment and Cruelty, 1750 to 1850." This decadence was largely due to the fact that institutions for the care of the insane became State asylums, with hired attendants, whose only interest after a time was the drawing of their salary and having as little trouble as possible with the care of the insane. In the previous centuries they had been under the care of the religious orders.

CHAPTER III

ST. IGNATIUS LOYOLA AND THE JESUITS

While painters and sculptors and architects and poets during the Renaissance period were creating masterpieces that were to influence all succeeding generations, a Spanish soldier, using men as his material, created a human masterpiece for the accomplishment of great purposes that was destined to be as vital and enduring as any of the supreme achievements of the time. As Raphael used color and Michelangelo marble, and Leonardo da Vinci the original ideas of an inventive genius of first rank, Ignatius Loyola formed men's wills to a great creative end that was destined to influence not only Europe but every continent on the globe perhaps more than any other creation of the time. The Company of Jesus, as he called it—and he liked to add the epithet little—the band of trained soldiers whose motto was to be "For the Greater Glory of God" (*Ad Majorem Dei Gloriam*) and whose purposes were to be as various as all the activities that can be included under such a standard, came to be within half a century after his death the most powerful body of intellectual men in their influence over mankind that the world has ever seen. It was not so much a deliberate creation as a Providential formation, gradually finding its place in the world under the guiding genius of a great soul living on after the death of the body it had informed.

Born in Spain in the Castle of Loyola the year before Columbus discovered America, the youngest of eleven children, Ignatius until his thirtieth year was a venturous chivalric soldier. Wounded at the siege of Pamplona by the French in 1521, when his leg healed in bad position, he had it rebroken, bearing the awful pain in those pre-anæsthetic days rather than have his pride annoyed by deformity. During the enforced idleness he read, after exhausting all the other reading of the place, especially the romances of chivalry, a life of Christ and lives of various saints, particularly that of St. Francis of Assisi, and came to the conclusion that life was only worth living when lived in imitation of the God Man. Amidst many almost incredible difficulties, for more than a dozen of years, he formed his character by spiritual exercises, took up the study of grammar in a class with little boys, supported himself by begging as one of the beggar students of the time, and gathered around him at the University of Paris a group of seven men, who in 1534 took their vows with him as members of the Company of Jesus. With true Spanish chivalry, their first object was to win over the Holy Land from the infidels by going to Jerusalem and converting it. Prevented by war from doing this, they became teachers and missionaries in Italy. Their zeal was so great and yet so directed by reason, they were so absolutely unselfish and had a charm that attracted so much attention, that they accomplished wonders. The Pope received them with kindness and gave them provisional confirmation of their rule. Pope Paul III had insisted on limiting the number of religious orders because of abuses that had arisen in them, but after reading Ignatius' rule he declared "the finger of God is here," gave them the fullest confirmation and in 1543 they were acknowledged as one of the religious orders of the Church.

Francis Thompson has summed up very strikingly, with a poet's eye for effect, the situation in Europe when Loyola was born. That will give the best idea what a confusion there was all around him at the moment when this son of an obscure nobleman began the work that was finally destined to bring order out of much of the religious and educational chaos of the time at least:

"It was a great, a brilliant, a corrupt epoch, fraught with possibilities of glory and peril to a youth of Spain. The old order was yielding. Throughout Europe the nations were loud with the falling ruins of feudalism, and the consolidation of absolute monarchies was ushering in the new political creation. In a mighty dust of war and revolt Christendom itself was vanishing, leaving in its stead an adjustment of States on a secular basis, to be known as 'the balance of European Power.'

"In the year after little Loyola's birth Columbus sailed to begin the New World. When the boy passed to the Court the day of Ferdinand and Isabella was done; Charles V was waiting to ascend the Spanish throne. Before he began the campaign which ended in the breach of Pamplona, Charles had inherited the sceptre of Spain and been elected to the Empire of Germany. The great captain, Gonsalvo de Cordova, was dead; Francis I was King of France, singing '*Souvent femme varie,*' and preparing to tilt with Charles for the supremacy of Europe. English Harry was still bluff Hal, no gospel light yet dawned from Boleyn's eyes and many an English Queen, little dreaming of that perilous dignity to come, still bore her head on her shoulders. But a thick-necked young German friar, with the Reformation in his cowl, was about to cut the tow-rope between the Teuton nations and the boat of Peter. There was a constable Bourbon who should presently halloo those revolting Teutons to the sack of Rome, there was Cellini, a goldsmith, who should brag to have killed him there: a young Gaston de Foix was to flame athwart Italy, and leave like a modern Epaminondas—the victors weeping at Ravenna: a Bayard, last of chivalry in an unchivalric age, was to leave a name *sans peur et sans reproche.* And there was a young Loyola: what of him? Why, before Cervantes came to laugh Spain's chivalry away, should he not be a Spanish Bayard, a Spanish Gaston de Foix, or indeed both in one?"

A knight he dreamed to be and a knight he was to be, but very different from his dreams. Cervantes did not laugh Spain's nor Europe's chivalry away. Any such thought was farthest from him. Ignatius Loyola was to demonstrate the chivalry still in many hearts and was to form and lead men who should accomplish knight-errant tasks all over the world, thinking not of themselves, but lifting men up, an army, as I have said he preferred to call it "a little company," of leaders of others to what seemed less quixotic in his time than in ours, the greater glory of God, but was not without its visionary quality even then. A knight undaunted, *sans peur et sans* *reproche,* he surely was, but when he fell his purpose actively survived him, his own great soul had passed into it and it was destined to survive him apparently forever.

After nearly four centuries the Jesuits, as Ignatius' "little company of Jesus" came to be called, are still at their work—teachers, missionaries, writers, scientists, editors; anywhere and everywhere accomplishing the purpose of their founder, doing anything and everything that seems best fitted to advance according to their motto, "The Greater Glory of God." When they were suppressed in 1773 there were about twenty thousand of them. After a full generation of formal non-existence they rose from the dead, as it were, and now there are some sixteen thousand of them in the world, with some twenty-five thousand pupils in their schools in this country alone, and probably two hundred thousand in their schools all over the world. No body of men have more influence, nor is that influence used more for good, than is true of the Jesuits. They are human, and individual members have their faults.

Ignatius was named as the first General, and to him is due the Constitutions of the Order. His only other writing is the little book of the "Spiritual Exercises," a compendium of the thoughts with which men were to exercise their souls and hearts during the thirty days of retreat which they made in order to strip themselves as far as possible of earthly motives and of all selfishness, so as to take up seriously the following of Christ. It has been said, and probably with justice, that this little book has influenced the conduct of men more since it was written than any that ever came from the hands of man. It was composed within the same quarter of a century while Machiavelli was writing "The Prince." The Jesuit constitutions have been the admiration of all those who have given them deep study and they are the model of those of most of the religious orders, both of men and women, founded since his time. They were not written with ideals alone in mind, but they were a growth in the mind of Ignatius during the years of his generalate and represent the condensed practical experience of the Jesuits during the first ten years of their existence as it passed through the alembic of a genius for government, directed by a saint's absolute desire only to secure the greater glory of God.

The only purpose of Ignatius was to influence men to imitate the life that the God Man had lived on earth, which had become the absorbing motive of his own life. He gave himself as a result to all forms of work for social betterment that would conduce to this. The teaching of catechism to children was considered most important by him, and he took it on himself as a personal obligation. The social evil and the reform of erring women were his special care in Rome, and he did not hesitate to be seen conducting these women to a house of refuge that he had had established for them in the city. His work for them accomplished great and lasting good. He realized that education was the most important means of influencing men, so to this his order was particularly devoted.

Ignatius' supreme quality was his marvellous ability to select the men who would be of service in great undertakings. St. Francis Xavier, who became the great Apostle of the Indies, acknowledged that he owed under Providence his call to this sublime work entirely to Ignatius, who had turned his ambition from the pursuit of scholarly distinction to a life directed to the extension of Christianity. The brilliant young professor at the University of Paris who at first rather despised the elderly student, apparently slow-witted because of unaccustomedness to the task of study, came to look upon Ignatius almost as a second father, and his expression "What doth it profit a man to gain the whole world and lose his own soul?" became for him the keynote of existence. Once he had given himself to the new purpose in life, Francis Xavier took nothing back, and when Ignatius obtained for him the privilege of going to the Indies as an apostle he succeeded in the ten years between 1542 and 1552 in planting Christianity firmly among the natives in both India and Japan, and was only prevented from accomplishing as much for China by his premature death in 1552. As it was, he left the inspiration of his example to be the spirit of the greatest missionary work in the East that has ever been known.

This work of the missions was to be one of the principal features of Jesuit accomplishment during the after-time. While they conducted some of the most important colleges in Europe and came to have more than one hundred thousand students under their care within a hundred years, their missionaries were soon to be found in every land. The century of Jesuit missions in Japan after St. Francis Xavier's time is one of the most glorious, edifying and romantic chapters in Church history. They succeeded in converting many thousands of Japanese and organizing them into Christian communities. Unfortunately political troubles within, commercial rivalries of various kinds from without eventually led to the persecution of the Christians. The Japanese Christians showed then that they knew how to die with the firmness of the early martyrs. All the priests were put to death or banished, and yet so thorough had been the training of the native catechists that even in our own time, with the opening up of Japan to missionary work again, village communities have been found in which the Christian faith was preserved.

In India their success was not less remarkable and they succeeded in solving the caste problem, which had been up to this time a hopeless obstacle in the path of Christianity. Robert de Nobili, the nephew of Bellarmine, the great theological writer and historian of the Church, adopted the dress and the extremely difficult habits of life of the high-caste Brahmin. In a few years he succeeded in converting over one hundred thousand of this hitherto impossibly exclusive class. He had many worthy companions as his colleagues and successors. Among others Andrada, the first Apostle of Thibet, succeeded in penetrating into the forbidden sacred land of the Lamas and in making many conversions. All the castes of India were taken care of and there were great missionary centres at Goa, Mangalore, Madura, Calcutta and Bombay.

The Chinese missions of the Jesuits were in their own good time not less successful and in certain ways gave the order even greater prestige. Distinguished scholars like Father Ricci impressed themselves upon even the contemptuous Chinese mandarins, established astronomical observatories and succeeded in gaining the favor of the Court. As a consequence, their brethren received permission to evangelize the people, and proceeded to make many thousands of converts. Unfortunately, here as in Japan, political disturbances in China itself and Western commercial jealousies, with the fear that the Jesuits might favor certain nations rather than others in trade, led eventually to their banishment and the destruction of their missions.

It is on the American continent, however, that the story of the Jesuit missions is particularly interesting for Americans. Ignatius himself founded the missions in South America, opening up the missions of Brazil through Father De Nobreza in 1549. Later in Chili, in Peru and in Mexico the Jesuits labored with unexampled success among the Indians. At the beginning of the seventeenth century they established the famous Reductions of Paraguay. These were communities of Christian Indians living in peaceful ways in the most happy community life. The story of the life led by the Indians in these Reductions reads more like some ideal commonwealth than an actual chapter of the history of a savage people gradually being brought to a happy civilization. Students of social order have often gone back to study the ways and means by which this great work was accomplished and have been enthusiastic in their praise of the marvels accomplished. In 1717 these Reductions in Paraguay counted over one hundred thousand Christian Indians. With the suppression of the Society in the Portuguese dominions after the middle of the eighteenth century they fell into decay, and an accomplished ideal of human life that made men happier than has perhaps ever before been the case disappeared from existence.

In North America the labors of the Jesuits were quite as wonderful as elsewhere, perhaps even more marvellous in the heroism displayed than in any other part of the globe. Their labors among the Indians, though they risked and often incurred torture and death and though their lives involved the most difficult kind of labors under the most trying conditions of hardship, lack of food and suffering from the inclemencies of the climate, and the still more uncertain temper of the savages, form a chapter in the history of humanity that is among the most stirring tales of human bravery for a high, unselfish purpose. The lives of such men as Fathers Daniel, Lallemant, Bréboeuf, Jogues and Marquette are monuments of supreme human devotion to the great cause of humanity and Christianity. They preceded the pioneers, and their stories of life among the Indians as told in the "Jesuit Relations" are the most precious documents in the early history of exploration on this continent, making important contributions to the sciences of Indian ethnology and of American geography, as well as other departments of knowledge. Bancroft said of them: "The history of their labors is connected with the origin of every celebrated town in the annals of French America; not a cape was turned, nor a river entered but a Jesuit led the way." Parkman has paid a fine tribute to their work as missionaries and pioneers, though it is sad to see how ill he appreciated the motive of their work and how he failed almost completely to realize the sublime humanity of their intentions.

Everywhere they went they devoted themselves not only to the spread of Christianity, but also to the gathering of precious scientific information, which they transmitted to Europe. They brought about the introduction into Europe of valuable botanical specimens, especially of medicinal plants and various substances that they found in use among the Indians. The name Jesuits' bark for quinine is only a testimony to the fact that it was a missionary of the order in Brazil who first learned how valuable this substance was in the treatment of malarial fevers and brought about its introduction into Europe. They compiled dictionaries of the Indian languages, which are now the only remains of some of these native American languages, important contributions to philology. Often these language studies are the only significant evidence of the relationships among the Indian tribes and of their real place of origin in the country. The geographical knowledge that they gathered and transmitted was most precious.

All this was done in the midst of a self-sacrificing life among the Indians that a modern reads with ever-increasing astonishment. It seems almost incredible when it is recalled that the men who bore these sufferings so heroically were always highly educated, scholarly graduates of European colleges and often the descendants of gently nurtured families. Not infrequently the missionaries could see but very little fruit from their labors for long periods and they had to be satisfied if they could make even a few converts among the old and the women and children as the result of years of labor. The contribution to civilization of these men, formed after the mighty saintly mind of Columbus' great contemporary Ignatius Loyola, is one of the greatest things that we owe to Columbus' Century.

The most important function of the Jesuits, however, as planned by Ignatius himself, was not missionary work, but education. Ignatius contemplated that his little Company of Jesus should be, first of all, teachers. His constitutions arranged the training and outlined the methods. Before a generation had passed after his death they had some of the best schools in Europe. Everywhere the Jesuit schools were attended by the better classes, and the first century of the history of the Jesuits had not closed before there were more than one hundred thousand students in attendance in their classrooms. The reason for this was that their system of teaching and of intellectual discipline turned out scholars better than any other. What they taught as the basis of education was the classics. The humanities had come in as a great feature of education with the Renaissance. When the order was founded the Renaissance spirit was at its height and the schools of the New Learning had multiplied all over Europe. The Jesuits adopted it as the best means of training the mind, and how well they used it history shows.

At once, with that careful attention to details so characteristic of the order, they began to systematize education, and the great *ratio studiorum,* probably the most significant contribution to the literature of methods of education ever made, was the result. It emphasized particularly the necessity for the prelection, that is, of preliminary discussion and explanation of the lesson which the students were expected to study for the next day, careful methods of recitation and demonstration and then finally insisted on the need of frequent repetitions. Competition was looked upon as a most precious element for the arousing of student interest. After a period of neglect, we are coming back to this thought once more. Themes, that is, written exercises, and especially those in which the language to be learned was directly employed, were set down as a most important factor in linguistic education. The actual use of the language to be learned in class was dwelt on. After the classics the student was expected to take a course in philosophy, that is, in logic and general metaphysics and psychology, before graduation. Above all, moral as well as intellectual training was insisted on.

In his "Essays on Educational Reformers," Quick summed up in the first paragraph of his book the place of the Jesuits in education rather strikingly: "Since the revival of learning, no body of men has played so prominent a part in education as the Jesuits. With characteristic sagacity and energy, they soon seized on education as a stepping-stone to power and influence; and with their talent for organization, they framed a system of schools which drove all important competitors from the field, and made Jesuits the instructors of Catholic, and even, to some extent, of Protestant Europe. Their skill in this capacity is attested by the highest authorities, by Bacon and Descartes, the latter of whom had himself been their pupil; and it naturally met with its reward: for more than one hundred years nearly all the foremost men throughout Christendom, both among the clergy and laity, had received the Jesuit training, and for life regarded their old masters with reverence and affection."

If the estimation of any body of teachers is to be rightly adjudged, surely there can be no better source of evidence with regard to them than what is to be obtained from their students. Almost without exception pupils of the Jesuits are most ardent in their praise. Only those who do not know them personally have been bitter in denunciation of them. To know them well enough is to love and honor them.

A few of the names of the great pupils of the Jesuit schools will serve to exemplify the sort of men that they were influencing by their education. Among them were: Bossuet, Corneille, Molière, Bourdaloue, Tasso, Fontenelle, Diderot, Voltaire, Bourdelais, Descartes, Buffon, Justus Lipsius, Muratori, Calderon, Vico the jurisconsult, Richelieu, Tilly, Malesherbes, Don John of Austria, Luxemburg, Esterhazy, Choiseul, St. Francis de Sales, Lambertini, one of the great scholars of his time, afterwards the most learned of Popes under the name of Benedict XIV, and the late Pope Leo XIII, one of the greatest of the moderns.

Some idea of the productiveness of the Jesuits as scientific, philosophic and literary writers may be obtained from the catalogue of their works issued by the Fathers de Backer and which has been brought up to date by Father Sommervogel. Hughes, in "Loyola and the Educational System of the Jesuits" in the Great Educators Series (Scribner's, 1902), has summed up the significance of these works:

"But at length the two Fathers de Backer published a series of seven quarto volumes, in the years 1853-1861; and the first step they followed up, in the years 1869-1876, with a new edition in three immense folios, containing the names of 11,100 authors. This number does not include the supplements, with the names of writers in the present century, and of the anonymous and pseudonymous authors. Of this last category, Father Sommervogel's researches, up to 1884, enabled him to publish a catalogue, which fills a full octavo volume of 600 pages, with double columns. The writers of this century, whom the De Backers catalogued in their supplement, filled 647 columns, folio, very small print. Altogether the three folios contain 7,086 columns, compressed with every art of typographical condensation.

"Suarez of course is to be seen there, and Cornelius à Lapide, Petau, and the Bollandists. A single name like that of Zaccaria has 117 works recorded under it—whereof the 116th is in thirteen volumes quarto, and the 117th in twenty-two volumes octavo. The catechism of Canisius fills nearly eleven columns with the notices of its principal editions, translations, abridgments; the commentaries upon it, and critiques. Rossignol has 66 works to his name. The list of productions about Edmund Campion, for or against him, chiefly in English, fills in De Backers' folio, two and a half columns of minutest print. Bellarmine, in Father Sommervogel's new edition, fills fifty pages, double column.

"Under each work are recorded the editions, translations, sometimes made into every language, including Arabic, Chinese, Indian; also the critiques, and the works published in refutation—a controversial enterprise which largely built up the Protestant theological literature of the times, and, in Bellarmine's case alone, meant the theological Protestant literature for 40 or 50 years afterwards. Oxford founded an anti-Bellarmine chair. The editions of one of this great man's works are catalogued by Sommervogel under the distinct heads of 54 languages.

"In the methodical or synoptic table, at the end of the De Backers' work, not only are the subjects well-nigh innumerable, which have their catalogues of authors' names attached to them, but such subjects too are here as might not be expected. Thus "Military Art" has 32 authors' names under it; Agriculture 11; Navy 12; Music 45; Medicine 28.

"To conclude then this history of our Educational Order, we have one synoptical view of it in these twelve or thirteen thousand authors, all of one family. We have much more. This one work 'attesting,' as De Backer says in his Preface, 'at one and the same time a prodigious activity and often an indisputable merit, whereof three and a half centuries have been the course in time, and the whole world the place and theatre, is a general record of religion, letters, science and education in every country, civilized or barbarous, where the Society of Jesus labored and travelled.'"

Very often it seems to be thought that, since the basis of Jesuit education was the classics, therefore little or no attention was paid to the sciences and consequently an important phase of human intellectual development was neglected and an essential set of interests of humanity were set back or at least failed of their evolution. Those who think that, however, fail entirely to know the history of the Jesuits and their educational efforts and achievements. As a matter of fact, the Jesuits have always had distinguished scientists among them, and many of the great discoverers and teachers in science for the last three centuries and a half have been members of the order. Very early in their history the Jesuits turned their attention to astronomy, then the one of the physical sciences most developed, and nearly every important Jesuit College soon had an observatory in which good work was done. When Gregory XIII, scarcely more than a quarter of a century after Ignatius' death, wanted to bring about the reformation of the calendar, it was to a Jesuit, Father Clavius, that he turned. Ever since that time there have been distinguished Jesuit astronomers. In our own time, Father Secchi, the Jesuit, probably did more important work than any other single astronomer of the third quarter of the nineteenth century. Among the names of the Jesuit astronomers are: Father Scheiner, who made observations particularly on the sun; Father Cysatus, whose papers on comets are justly numbered among the most important concerning this subject; Father Zupi, who first described the dark stripes or bands on Jupiter and first saw the phases of Mercury which Galileo surmised rather than saw; Father Grimaldi, who studied Saturn and drew up one of the first maps of the moon worthy of the name; Father Riccioli, who introduced the lunar nomenclature; Father Maximilian Hell, whose memory our own Newcomb vindicated, and many others.

They were noted for their intimate relations with scholars who were devoting themselves to similar subjects, and they were close correspondents of Kepler and succeeded in helping him to keep his professorship at the University of Gratz when the Emperor of Austria issued a decree banishing all Protestant professors from Austrian Universities.*

It must not be thought, however, that the Jesuits were interested only in astronomy. They had a large number of mathematicians and of teachers of all the physical sciences. The famous Roman College, founded in St. Ignatius' time, was always looked up to as the type of what a Jesuit College should be. It was here that the great scholarly Father Kircher taught for nearly half of the seventeenth century. He was invited to Rome to begin his teaching there just before the condemnation of Galileo. He would not have received the invitation had there been the slightest feeling of opposition on the part of the Church or his order to the teaching of science. While teaching at the Roman College he wrote a series of text-books on all phases of physical science. There are several text-books on magnetism, one on light, a second on sound, a third on astronomy, a fourth on the subterranean world and many others.

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* About this same time when Harvey on a trip through Europe went to visit the Jesuits in their colleges in a number of towns, the fact was noted by the men who accompanied him, and they jested with him as regards the possibility of his either converting the Jesuits or being converted by them. He said, however, that he found nowhere more sympathetic friends and interested scholars than among these religious. His friendship for them has even given some ground for the declaration that he may have been a Catholic.

It would be easy to think that these books are mere compilations and that they were probably scarcely more than small hand-books of the imperfect knowledge of the time. On the contrary, they are magnificent large volumes beautifully printed, finely illustrated, bibliographic treasures full of original observation. They are some of the best text-books ever issued. Father Kircher's originality is demonstrated by the fact that he is the perfecter of the projecting stereoscope or magic lantern, which he was led to invent in his desire to be able to make demonstrations to his classes. He also founded the Kircherian Museum, by which the teaching of anthropology and ethnology were greatly furthered through the curiosities sent to Rome by the Jesuit missionaries all over the world. His book, "On the Pest," is full of observations of great value and contains the first suggestions that infectious diseases are carried by insects. There was no subject that he touched that he did not illuminate.

Since that time there have been many distinguished Jesuit scientists, and they have continued their work down to our own day. At the present time, one of the best known of biologists in the special field of entomology is Father Wasmann, S.J., who has published some seven hundred papers on ants, their hosts and guests, and who, taking advantage of the help of his brethren all over the world, has described many hundreds of new species. How successful the Jesuits have been in their pursuit of science will perhaps be best realized from the fact that, while in Poggendorff's "Biographical Dictionary of Science" out of something less than nine thousand names nearly one thousand are Catholic clergymen, about five hundred of these are Jesuits. Their occupations first of all as priests often left them but little leisure for scientific investigations, and yet they succeeded in stamping their names upon the history of science.

Two departments of modern science owe much to them. Father Secchi's wonderful inventions of instruments for meteorology were awarded prizes by the French Academy of Sciences, and other members of the order made successful investigations in the science. The Jesuits in the Philippines and the West Indies have done more to study out the conditions which precede cyclones and hurricanes so as to give warning with regard to them than any others. Their work was fully recognized by the United States Government. Many of the Jesuit colleges and universities throughout the world now have seismological observatories for the study of earthquakes, and undoubtedly their intimate connection and wide distribution will bring important details of information into this department of knowledge from which significant conclusions may be reached.

The work of the Jesuits has come to be better appreciated in English-speaking countries, where old religious prejudices hampered its proper recognition, until comparatively recent times. Macaulay, in his essay on Ranke's "History of the Popes," has summed up the achievements of the Jesuits in his own striking way. When he wrote the Jesuits were unknown personally in England, and so it is not surprising that there are passages in his panegyric that are full of the old prejudices which had accumulated in English history and by which the term Jesuitic has become a word of the worst reproach. Macaulay's wide reading, however, had brought to him a very extensive knowledge of the wonderful work accomplished by Loyola and his sons during the two centuries after their foundation. The passage is too well known to be more than referred to here.

His tribute to their successful work as missionaries all over the world, which undoubtedly set the fashion after which Protestant historians in English-speaking countries have come to acknowledge the marvellous work of the Jesuits among the savages, is not so well known: "The old world was not wide enough for this strange activity. The Jesuits invaded all the countries which the great marine discoveries of the preceding age had laid open to European enterprise. In the depths of the Peruvian mines, at the marts of the African slave-caravans, on the shores of the Spice Islands, in the observatories of China, they were to be found. They made converts in regions which neither avarice nor curiosity had tempted any of their countrymen to enter, and preached and disputed in tongues of which no other native of the West understood a word."

No wonder that Parkman, who in some ways has helped to make us Americans understand them better but who in many ways is utterly lacking in proper sympathy for them probably because he failed to know them well personally, said of them:

"The Jesuit was, and is, everywhere—in the schoolroom, in the library, in the cabinets of princes and ministers, in the huts of savages, in the tropics, in the frozen north, in India, in China, in Japan, in Africa, in America; now as a Christian priest, now as a soldier, a mathematician, an astrologer, a Brahmin, a mandarin, under countless disguises, by a thousand arts, luring, persuading, or compelling souls into the fold of Rome."

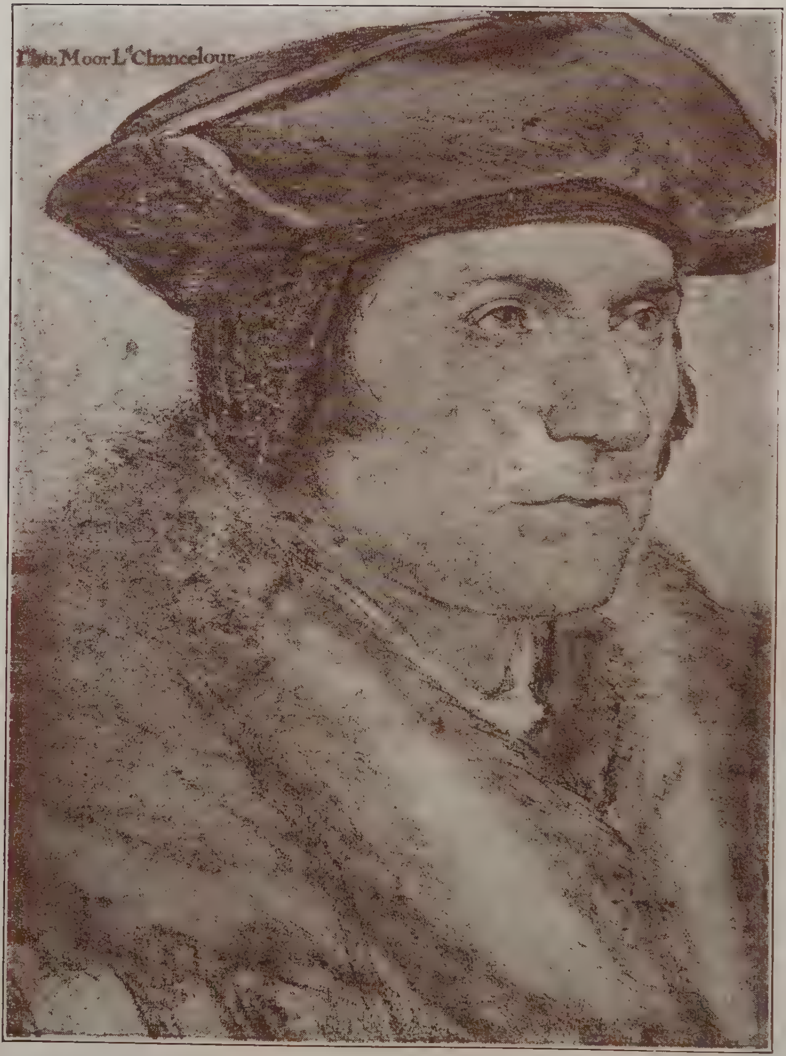
He feels sure that there must be much to condemn in them, since they have been the subject of so much criticism and persecution. Like many another, he cannot bring himself to think that their founder's last wish for them, that they should be persecuted even as their Lord and Master was, should be the symbol of their fate. Where he knows them best, however, as in Canada, he has unmixed praise for them, though he declares that it is not for him to eulogize them, but to portray them as they were.

At once the keynote for the proper appreciation of the Jesuits and the summary of what Loyola accomplished through them is to be found in the closing paragraphs of Francis Thompson's "Life of St. Ignatius" (Benzigers': New York, 1909, pp. 318):

"Issuing from this Manresan cave, forgotten by the world which he had forgotten, and rejected in the land which bore him, single and unaided he constructed and set in motion a force that stemmed and rolled back the reformation which had engulfed the North and threatened to conquer Christendom. He cast the foundations of his Order deep; and, satisfied that his work was good, died—leaving it for legacy only the God-required gift that all men should speak ill of it.

"Most singular bequest that Founder ever transmitted, it has singularly been fulfilled. The union of energy and patience, sagacity and a self-devotion which held nothing impossible that was bidden it, were the leading qualities of St. Ignatius; and so far as his Order has prospered, it has been because it incarnated the qualities of its Founder. The administrative genius which, among the princes of Europe or the 'untutored minds' of Paraguay, is perhaps its most striking secular feature, comes to it direct from the man who might have ruled provinces in the greatest empire of the sixteenth century; but chose rather to rule, from the altars of the Church, an army which has outlasted the armies of Spain, and made conquests more perdurable than the vast empire which drifted to its fall in the wake of the broken galleons of the Armada."

The Jesuits are literally one of the greatest creations of this great period. Not to know them as such is to miss the significance of their order and not a little of the true spirit of the epoch from which they sprang. The arts and literature of the Renaissance produced no work destined to live so vividly, nor to influence men in all succeeding generations so deeply, as "the little company of Jesus," as Ignatius of Loyola conceived and organized it.



HOLBEIN, SIR THOMAS MORE

CHAPTER IV

SIR THOMAS MORE AND SOME CONTEMPORARIES

While in this great period of the Renaissance, Raphael, Leonardo da Vinci and Michelangelo, and so many others, were demonstrating the power of the human mind to express itself in æsthetic modes of all kinds, and Copernicus and Regiomontanus and Vesalius and Paracelsus were showing how man's intellect might penetrate the mysteries of the universe without him and that smaller universe the microcosm that he is himself, and Erasmus and Pico della Mirandola and Linacre were exhibiting human scholarship at its highest, a great contemporary in England expressed human life at its best in strong terms of the human will. This was Sir Thomas More, Lord Chancellor of England, put to death by Henry VIII, but not until he had succeeded in making out of his life a wonderful work of living art of the profoundest significance, to which men of all classes have been attracted ever since. He was a great scholar, a great lawyer, a great judge—the only man who ever cleared the docket of the English Court of Chancery,—a writer of distinguished ability not only in his own language but in Latin, a philosopher who so far as the consideration of social problems was concerned deserves a place beside Plato: yet not for any of these attainments is he famous, but for his unflinching following of what he saw to be his duty even though it cost him everything that men usually hold dear—life, reputation, property and even the possibility of poverty and suffering for those he held dear after his death.

Sir Thomas More was born in London, February 7, 1478. We are likely to think of the Wars of the Roses as farther away from us, but they were not yet over. Edward the Fourth was now firmly fixed on the throne, but there had been stormy times for the monarchy in his reign. Edward originally ascended the throne in March, 1461, but the revolt of the Kingmaker Earl of Warwick had led to the restoration of poor Henry VI in 1470, and Edward had to flee the country. He returned in 1471, defeated Warwick at Barnet, April 14, 1471, and Margaret of Anjou at Tewkesbury, May 4, 1471. There was tranquillity for a dozen of years after this, but it was not until Henry VII defeated Richard III at Bosworth in 1485, and then married the Yorkist Princess Elizabeth, that peace was assured to England. It was into a very disturbed England, then, that Sir Thomas More was born. As a boy he had as teacher Nicholas Holt, who seems, with the true Renaissance spirit, to have been thoroughly able to arouse the youth's interest. At the age of twelve he entered the household of Cardinal Morton, the Archbishop of Canterbury. It was the good old custom at that time to have boys brought up in the households of distinguished nobles or high ecclesiastical dignitaries, with the idea that association with men of parts represented the best stimulus for that development of the intellectual faculties which constitutes real education.

It was not long before young More attracted the attention of the distinguished old Cardinal, who prophesied his future greatness. Roper, who married More's daughter Margaret, tells an incident of the boy's life at this time and adds that, as a consequence of the Cardinal's appreciation of him, More was sent to the university. He says in a famous paragraph that shows us More's precocity and that sense of humor that was to characterize him all his life:

"Though More were young of years, yet would he at Christmas suddenly sometimes step in among the players, and never studying for the matter, make a part of his own there presently among them which made the lookers on more sport than all the players beside. In whose wit and towardness the Cardinal much delighting, would often say of him to the nobles that divers times dine with him: 'This child here waiting at the table, whoever shall live to see it, will prove a marvellous man.' Whereupon for his better furtherance in learning, he placed him at Oxford."

After some four years in the Cardinal's household, More went to the university on the bounty of his patron, and afterwards took up the study of law and was admitted to the bar.

When he was twenty-six More became a member of Parliament, and the next year, in 1505, he married. The story of his marriage has an interest rather unique of its kind. He had gone down to the home of John Colt of Newhall, in Essex, with the avowed purpose of getting him a wife. He had been told that John's elder daughter was just the person for him. When he got down there he liked the second daughter better, but married her elder sister so as not to subject her to the discredit of being passed over. There are those who have said that his sanctity began right there. It is to be hoped that his wife knew nothing of it until much later.

The year of his marriage, when he might reasonably have been expected to be circumspect as to his political future, More strenuously opposed in Parliament King Henry's (VII) proposal for a very large subsidy as the marriage portion of his daughter Margaret. In spite of his youth, his arguments in the matter were so forcible and in accord with old-time custom and law in England that the House of Commons reduced the subsidy to scarcely more than a quarter of the amount demanded. When his favorite courtiers brought to Henry VII the news that a man whom he would deem scarcely more than a beardless boy had brought about the disappointment of his hopes and schemes and deprived him of an opportunity to fill his coffers, than which nothing was dearer to the miserly King's heart, it is easy to understand that More was not a favorite at Court.

More seems to have considered it advisable to absent himself from England for a while at this time, because of the king's displeasure. This provided an opportunity to spend some time at Paris, and also at Louvain. At Louvain he began that acquaintance with Erasmus which ripened into the enduring intimacy of later life. No opportunity seems to have been missed by him to develop his intellect and broaden his intellectual interests. While he was a lawyer, the Greek authors became a favorite subject of study and philosophy and science his diversions. Literally, it might be said of him, that there was nothing that was human that did not interest him.

After some time, More returned to London and took up the practice of law. After the death of Henry VII, in 1509, he became the most popular barrister of the day and very soon obtained an immensely lucrative practice. He refused to receive fees from the poor, and especially from widows and orphans who seemed to him to be oppressed in any way. Tradition shows him as a sort of legal aid society for the city of London at that time. He absolutely refused to plead in cases which he thought unjust. Such punctilious practice of the law is sometimes said to hamper a successful career and, above all, lead to the loss of the opportunities that bring a lawyer into prominence. The very opposite happened with More, and he became the best known of his profession before he was forty.

The pleasantest part of More's life was these years of his professional career. He then had the opportunity to associate frequently in the most charming of friendly and literary intercourse with the group of men whose names are famous in the English Renaissance. He and Erasmus were life-long friends, and perhaps there is no greater tribute to Erasmus' character than More's devoted affection for him, and his sympathetic devotion to More. Erasmus himself, though a much greater scholar, had nothing like the depth and strength of character possessed by More. The men were in many ways almost exact opposites of each other, and perhaps they felt how complementary their qualities were. More was eminently practical, Erasmus was rather impractical; More was humorous, Erasmus was witty. More sympathized with all humanity, even when he found something to criticise; Erasmus' criticism was likely to be bitter and he laughed at rather than with people, so that he did not make himself generally loved, but quite the contrary, except for a few close friends, while the most typical characteristic of More's life is the love and affection it aroused.

More's family life is one of the most interesting features of his career. Erasmus has spoken of it with enthusiastic admiration and, as he had personal experience of it for rather long periods at several different times and was himself a highly sensitive, readily irritable individual, his testimony in the matter is all the more significant. It may be due to Erasmus' enthusiastic admiration for More, but in any case it shows us how thoroughly he appreciated and was ready to place on record his enjoyment of the privilege of being received as a friend into the household:

"Does my friend regulate his household, where misunderstandings and quarrels are altogether unknown! Indeed, he is looked up to as a general healer of all differences, and he was never known to part from any on terms of unkindness. His house seems to enjoy the peculiar happiness that all who dwell under its roof go forth into the world bettered in their morals as well as improved in their condition; and no spot was ever known to fall on the reputation of any of its fortunate inhabitants. Here you might imagine yourself in the academy of Plato. But, indeed, I should do injustice to his house by comparing it with the school of that philosopher where nothing but abstract questions, and occasional moral virtues, were the subjects of discussion; it would be truer to call it a school of religion, and an arena for the exercise of all Christian virtues. All its inmates apply themselves to liberal studies, though piety is their first care. No wrangling or angry word is ever heard within the walls. No one is idle; everyone does his duty with alacrity, and regularity and good order are prescribed by the mere force of kindness and courtesy. Everyone performs his allotted task, and yet all are as cheerful as if mirth were their only employment. Surely such a household deserves to be called a school of the Christian religion."

Some who have found a lack in the chancellor's life of what may be called romance, for both his courtships were eminently matter-of-fact, may find adequate compensation for this and material for the proper appreciation of More's affectionate nature in the contemplation of the intense affection which he displayed for his children, and especially for his daughter Margaret. Margaret More richly deserved all this affection of her father, but there is probably not a case in history where such affection has been so charmingly expressed. Fortunately for us, the extensive correspondence that passed between father and daughter is largely preserved for us. The letters are charming expressions of paternal and daughterly affection. Perhaps the one that may interest the young folks of this generation the most is that in which Sir Thomas replies to a letter of his daughter's asking for money. Probably there would be rather ready agreement that, in the great majority of cases, paternal answers to filial requests for money in our time are couched in somewhat different terms. The father wrote with classic references that are meant to make her studies seem all the more valuable:

"You ask me, my dear Margaret, for money with too much bashfulness and timidity, since you are asking from a father that is eager to give, and since you have written to me a letter such that I would not only repay each line of it with a golden philippine, as Alexander did the verses of Cherilos, but, if my means were as great as my desire, I would reward each syllable with two gold ounces. As it is, I send you only what you have asked, but would have added more, only that as I am eager to give, so am I desirous to be asked and coaxed by my daughter, especially by you, whom virtue and learning have made so dear to my soul. So the sooner you spend this money well, as you are wont to do, and the sooner you ask for more, the more you will be sure of pleasing your father."

Linacre, the second of the group with whom More was associated to a considerable extent, is one of the great characters of the England of that time. Like More, he had attracted the attention of a great Churchman, Bishop Selling; when young, he had gone to Italy in his train and there had had the advantage of intimate association with the family of the Medici when Lorenzo the Magnificent was training his boys to be rulers of Italy, political and ecclesiastical. Linacre stayed some ten years in Italy, mainly during the pontificate of Pope Alexander VI, of whom so much that is derogatory has been said, but, instead of having his devotion to the Church lessened by the abuses that are said to have existed in Italy at this time, he came back to England as a fervent Catholic. Years afterwards, when toward the end of life he felt its emptiness, he distributed his property for educational purposes and became a priest. His foundations in both Cambridge and Oxford, and especially his foundation of the Royal College of Physicians, were very valuable contributions to the intellectual life of England. The College of Physicians lives on under the constitutions that he provided. His chairs founded at Oxford and Cambridge were not so fortunate, because the disturbances of the end of Henry VIII's reign and the time of Edward VI led to the confiscation of many of these educational foundations, or at least of their diversion to the King's private purposes.

Erasmus was the greatest scholar of the time, Linacre was looked up to as perhaps the best Greek scholar of the period, and, while in Italy, Manutius in Venice had taken advantage of his knowledge for the editing of certain of the Greek classics. He himself translated a number of volumes of Galen into Latin, and the translation was proclaimed, in Erasmus's words, to be better than the original Greek.

The third of this group of friends of More was scarcely less distinguished than the other two. It was Dean Colet of St. Paul's. He, too, had been touched by the spirit of the Renaissance, but like all the others of this group, instead of being attracted towards Paganism or away from Christianity, his devotion to the Church and his faith had been broadened and deepened by his knowledge. His sermons at St. Paul's attracted widespread attention. But his personal influence was perhaps even more telling.

According to tradition, these men and certain others, as Lyly and at some times probably John Caius, who afterwards founded Caius College at Cambridge, used to meet for an afternoon's discussion of things literary, social and philosophic at the home of Colet's mother in Stepney. There we have a picture of them arguing over literary questions with that intense seriousness which characterized the Renaissance, and in the midst of which Colet had sometimes to restrain the ardent enthusiasm of the others lest argument should run into strife. Here, according to tradition, Dame Colet, mother of the Dean, used sometimes to bring them for a collation some of the strawberries that had been introduced into England from Holland, probably by Erasmus himself or through his influence, and some of which were grown in the Colet garden. With English milk and the sweet cakes of the time, they made a pleasant interlude in the afternoon or served as a fitting smoothing apparatus for the end of a discussion that had waxed hot.

Such a group of men make an Academy in the best sense of the word. When Plato led his scholars through the groves of Academus and discussed high thoughts with them, the first Academy came into existence and the English Renaissance furnished another striking example of how the friction of various many-sided minds may serve to bring out what is best in all of them. The pleasure of such intercourse only those who have had opportunities of sharing it can properly appreciate. The meetings must, indeed, have been events in the lives of the men, and More, who had not had the opportunity to go to Italy, must have drunk in with special enthusiasm all that their long years of Italian experience had given to the others. These interludes from his more serious practical duties at the bar must have been most happy and marvellously broadening in their effects.

A good idea of More's interests as a young man between twenty-five and thirty can be obtained from his setting himself to make a translation of Pico della Mirandola's "Life, Letters and Works." While Pico was one of the most learned men of the Renaissance, he was also one of the most pious. And more than any other he showed the possibility of being profoundly acquainted with Greek culture, and yet retaining a deep devotion to religion. More's praise of him in the life that he wrote shows better than anything else the drift of his own thoughts. The passage affords a good idea of More's prose style in English, with the spelling somewhat but not entirely modernized:

"Oh very happy mind," he writes, "which none adversity might oppress, which no prosperity might enhance: Not the cunning of all philosophy was able to make him proud, not the knowledge of the hebrewe chaldey and arabie language besides greke and latin could make him vain gloriuse, not his great substance, not his noble blood coulde blow up his heart, not the beauty of his body, not the great occasions of sin were able to pull him back into the voluptous broad way that lead us to hell: what thing was there of so marvelous strength that might overturn that mind of him which now: as Seneca saith was gotten above fortune as he which as well her favor as her malice hath, saitheth nought, that he might be coupled with a spiritual knot unto Christ and his heavenly citizens."

More also wrote some verses on the vicissitudes of fortune, in which he describes her as distributing brittle gifts among men only to amuse herself by suddenly taking them back again. It was the literal expression of his own career, and his advice as to how to defy her is best illustrated by his own life:

> "This is her sport, thus proveth she her might;
> Great boast she mak'th if one be by her power
> Wealthy and wretched both within an hour.
> Wherefore if thou in surety lust to stand,
> Take poverty's part and let proud fortune go,
> Receive nothing that cometh from her hand.
> Love, manner and virtue: they be only tho,
> Which double Fortune may not take thee fro':
> Then may'st thou boldly defy her turning chance,
> She can thee neither hinder nor advance.'"

The young King Henry VIII became deeply interested in More because of his brilliancy of intellect, his successful conduct of affairs, his sterling character and, above all, for his wit and humor. He wanted to have him as a member of his Court, but this More long resisted. He preferred independence to a courtier's life, and in spite of the urging of Wolsey, who had been made a Cardinal by Leo X in 1515, and alleged how dear his service would be to his majesty, continued to refuse. After an embassy to Flanders, however, on which he went with Cuthbert Tunstal to confer with the ambassadors of Charles V, who was then, however, only Archduke of Austria, upon a renewal of the alliance with the English Monarch and a further embassy of the same kind in 1516,

But

More consented to enter the Royal Court. On his embassy in Flanders he had probably taken the leisure to write out his "Utopia" in Latin, and it was published on the Continent, though not published in England until nearly twenty years after his death. The contact with Erasmus woke More's literary spirit, and Erasmus felt that there were magnificent possibilities for literature in More's intellect. Erasmus bewailed his becoming a courtier and says in his letters "the King really dragged him to his Court. No one ever strove more eagerly to gain admission there than More did to avoid it."

More's literary reputation rests more particularly on his "Utopia," written when he was thirty-seven years of age, during his absence from England on the commission in the Low Countries with Cuthbert Tunstal. That absence was but for six months, and this will give some idea of More's industry. At home he was deep in his law practice, and now when he had leisure from social and ambassadorial demands he found time to write one of the most interesting contributions to the science of government from the social side that probably has ever been written. It was written in Latin and was first printed at Louvain late in 1516 under the editorship of Erasmus, Peter Giles, sometimes known under his Latin name as Ægidius, and others of More's literary friends in Flanders. It was subsequently revised by More and printed by Frobinius at Basel in November, 1518. The book became popular on the Continent and was reprinted at Paris and Vienna, but was not published in England during More's lifetime. More evidently feared that it might be misunderstood there, though he had been very careful in the course of the book to make whatever might seem to reflect upon England appear to be directly referred to some other country.

An English translation was not published in England until Edward the VI's reign in 1551. The standard translation, however, is that made by Bishop Burnet. It can scarcely but seem strange that the author of the history of "The Protestant Reformation," who more than any other almost kept England from relaxing any of her antipopery feeling or governmental regulations, should translate the last great Papal

Catholic's book for his countrymen, but it is a tribute the significance of which cannot be missed. Burnet is said to have been induced to make the translation from the same feelings of protest against arbitrary government that led to More's writing of it. The passages quoted here are always taken from Burnet's translation.

Unfortunately, "Utopia" is mainly known to ordinary readers from the adjective Utopian, derived from it and which has come to mean a hopelessly ideal or infeasibly impractical scheme. Doubtless many have been deterred from even the thought of reading it, because of the feeling produced that a book of Utopian character could not be of any serious import. Utopia from the Greek simply means nowhere. More himself often calls it by the Latin name Nusquama, with the same meaning. It was simply a country which unfortunately existed nowhere as yet, in which things were done very differently from anywhere in civilized Europe at least, but where the people had reasoned out what ought to be their attitude of mind towards many things which in Europe following tradition and convention were liable to many abuses and social wrongs.

Sir Thomas recognized all the danger there was from the so-called Reformation and did not hesitate to take his part in the controversies that inevitably came. As early as 1523 he published the answer to Luther, in 1525 a pamphlet letter against Pomeranus, in 1528 the dialogue "Quoth He and Quoth I," in 1529 the "Supplication of Souls," in 1531 the "Confutation of Tindale," in 1532 his "Apology," in 1533 "The Deballation of Salem and Bizance" and in 1533 the "Answer to the Supper of the Lord," probably written by either William Tindale or George Jay.*

When Cardinal Wolsey, Lord Chancellor, fell after the failure of the divorce proceedings, the King insisted on Sir Thomas More accepting the position. More must have known how difficult, indeed almost impossible, the post would be for him. It was dangerous, however, to oppose Henry VIII's will, and so within a week after the deposition of Wolsey, Sir Thomas More was installed as Lord Chancellor, an office that had very seldom before this been held by a layman, though it has been held by laymen ever since, almost without exception. His installation is said to have taken place with the joy and applause of the whole kingdom. There are some who have said that More was glad to triumph over Wolsey, and that indeed he took advantage of the opportunity afforded him by the new dignity to abuse his predecessor and to show that he had schemed to succeed him. There are no grounds for such expressions, however, and even Wolsey himself had declared that More was the man who should have the post, the only one fitted to succeed him. Erasmus, writing on the matter, is quite sure that More himself does not deserve to be congratulated, for he foresaw the difficulties ahead, but the kingdom deserves congratulation. He felt, too, that it would be a loss to literature. As he said: "I do not at all congratulate More or literature, but I do indeed congratulate England, for a better or holier judge could not be appointed."

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* A good idea of how the spelling of the English language has changed in four centuries may be gathered from the title of one of these controversial works of More's, as it appeared recently in the catalogue of a bookseller. The frequent use of *y* where we now use *i* would almost make one think that the *i*'s have been exhausted in the

The most characteristic feature of More's Chancellorship was his prompt disposing of cases. He realized very well that not only must justice be done, but as far as possible it must be done promptly, and the tedious drawing out of cases to great length works injustice, even though they are justly decided after many years. The Court of Chancery in England has become a byword for slowness of procedure and has been satirized on many occasions during the nineteenth cen-

particular font of type, or else that this typesetter had a special fondness for *y*. This latter idea is probably true, for, as a matter of fact, in books printed about this same time so many y's were not ordinarily used.

"Sir Thomas More A dyaloge . . . whereyn he treatyed dyvers maters as of the veneracyon and worshyp of ymagys and relyques, prayng to sayntis, and goynge on pylgrymage. Wyth many other thyngys touchyng the pestylent secte of Luther and Tyndale, etc. Newly oversene. Sm. folio black letter, with the leaf of "fawtes escaped in the pryntynge."

tury, but already in the sixteenth century there were many cases before the Court that had been dragging on for twenty years, and even more. Delays were mainly due to the fact that Lord Chancellors were occupied with many other duties and did not always feel equal to the task of trying cases and weighing evidence. Undoubtedly some delays had been occasioned by the fact that presents were received, if not by the Lord Chancellor himself at least by court officials, and the longer cases were allowed to drag on the more opportunity was there in them for such irregularities. The clearing up of the calendar of the Court of Chancery marked an epoch in English legal history and is one of our best evidences of More's thoroughly practical character.

It is by his death more than anything else that More is admirable. Here was a man of marvellous breadth of interests, to whom life must have meant very much. As a young man he had been brought in intimate contact with the pick of the intellectual men of his time. In early manhood he had been the chosen friend of the best scholars in Europe—men like Colet, Erasmus and Linacre, with international reputations. He had represented his King abroad in important missions before he was forty. He had shown himself a great lawyer in spite of a scrupulosity of conscience that would ordinarily be supposed to make the successful practice of the law extremely difficult. Notwithstanding the most thorough honesty in every activity of life and the absence of every hint even of truckling of any kind to popular or royal opinion, he had been the favorite of all classes. As an author he wrote books that the world will not willingly let die. They are occupied with things that men often push away from them, serious, high-minded, purposeful, yet they are more read now than they were in his own time. He was a philosopher worthy to be placed beside the greatest practical philosopher, and his ideal republic, written in his own profound vein of humor, is a distinct contribution to that form of literature.

To this man there came, about the age of fifty, the highest office that he could possibly hope to attain in England. He was the favorite of his King and of the Court. He used his high office for the benefit of the commonwealth in every way, and above all for the benefit of the people. He revolutionized methods in chancery and succeeded in bringing Justice back to haunts of the law, where her presence had been so rare as almost to be doubted. He had a great future before him in the possibilities of good for others. Unselfish as he had always shown himself to be, surely he could have had no greater satisfaction for his ambition than this. In the midst of his efficient duties there came a decision to be made with regard to himself. The Lord High Chancellor of England is often spoken of as the keeper of the King's conscience. Such More evidently deemed himself to be in reality. Anyhow, he was the keeper of his own conscience.

The King, unable to obtain a divorce from the wife whom he had married twenty years before in order to marry a younger, handsomer woman, had resolved to grant one to himself and for that purpose assumed the supremacy in Church as well as in State. The great nobles, knowing his headstrong character, submitted to this usurpation of authority, which was besides baited with the possibility of enrichment through the confiscation of monastic property and its transfer to king's favorites. Even the bishops of England hesitated but for a time, and then almost to a man took the oath of supremacy which declared Henry to be supreme head of the Church as well as the State. There were only one or two notable exceptions to this.

It would seem as though after this there ought to be no difficulty for More. If the bishops and the clergy of the country were willing to accept the King as the head of the Church, why should a layman hesitate? And yet More hesitated. He refused to take the oath of supremacy. It was represented to him that to refuse was dangerous. On the other hand, it was shown to him, and it must have been very clear to himself, that if he took it he would obtain great favor with the King, and that indeed there was almost nothing that he might not aspire to. Lord Chancellor he was, but ennoblement and enrichment would surely come to him. The King had always thought much of him, was now particularly irritated by his refusal, but would be won to him completely if he yielded. It seemed not unlikely that a peerage would be his at once, and that higher degrees of nobility were only a question of time. Times were disturbed, and he might be able to do much good, certainly he could not expect that other advisers near the King would do anything but yield to the monarch's whims.

Here was a dilemma. On the one hand, honor, power, wealth and the favor of his King, as well as the esteem of his generation; on the other hand, disgrace, impoverishment of his family by attainder, imprisonment, probably death. More calmly weighed it all and decided in favor of following his conscience, no matter what it might cost him. He did so entirely on his own strength of character and without any encouragement from others. On the contrary, there was every discouragement.

Having made his decision he did not proceed to think that everyone else ought to have seen it the same way, but on the contrary he felt for the others, realized all the difficulties and calmly recognized that they might well be in good faith. When the decision of his judges that he must die was announced to him, he told them very calmly that he thanked them for their decision and said that he hoped to meet them in heaven. The passage is well worth reading in More's own quaint, simple, forcible language.

It is probable that there has never been an occasion in the world's history when the obligation of following conscience has been more clearly seen and more devotedly acknowledged than when More went to death for what was called treason, because he refused to take the oath that the King of England was the head of the Church as well as of the State. Every human motive was urgent against his following of conscience in the matter. He stood almost entirely alone. Bishop Fisher of Rochester, it is true, was with him, but More stated in one of his letters that even had the bishop found some way to compound with his conscience and take the oath as so many other upright and conscientious men, as they thought themselves and others thought them, had done, he did not feel that he could take it.

It was urged upon him that the very fact that he stood alone showed that there must be something wrong about his method of reasoning and his mode of coming to a decision in the matter. All the bishops of England had consented to take the oath. Some of them, it is true, had solaced their conscience by putting in an additional phrase, "as far as the law of God allowed," or something of that kind, but most of them had taken it without any such modification, and indeed, as a rule, the Commissioners who had administered the oath refused to accept it unless taken literally and without additions.

Perhaps the hardest trial for More's constancy of purpose came from his own family. When he was imprisoned they were allowed to see him frequently, with the deliberate idea that they would surely break down his scruples. His wife absolutely refused to see why anyone should set himself up in opposition to all the rest of the kingdom and think that his conscience should be followed no matter what happened, though so many other people's consciences were apparently at ease in the matter. As she said to him over and over again, did he think that he was better than the Bishops of England and the priests who had taken the oath, and did he set himself up as the only one who properly understood and could see the right in the question? Some of her expressions are typical of women in her position and show us how little human nature has changed in these four hundred years. More simply laughed at her quietly and gently and, after explaining his position a few times from varying standpoints, refused to argue with her, but occupied the time of her visits with talk about other matters as far as possible. It was not hard to divert her mind, as a rule, to any other subject, for she did not see very deeply into anything and, above all, had no hint at all of the serious condition of affairs in England.

His daughter Margaret, of whom he thought so much, was a much more dangerous temptress than Mistress More, though of course she did not think of herself in any such rôle. She has told the story in a letter to the Lady Allington, More's step-daughter, for his second wife had been previously married. Lady Allington had written to Margaret a long letter, in which she related an interview that she had had with Audley, the Lord Chancellor, who had promised to help

More, though he declared that the remedy was in More's own hands, if he would put aside his foolish scruples. Audley had said to Lady Allington that "he marvelled that More was so obstinate in his own conceit in matter that no one scrupled save the blind Bishop [Fisher] and he." Always, when wife or daughter came to see him, they first prayed together, and I may say that the prayers were not short, for they included the Seven Penitential Psalms as well as other formal prayers. When Margaret approached the subject of Lady Allington's letter and how More's obstinacy was alienating his friends, smiling, he called her mistress Eve, the temptress, and asked if his daughter Allington had played the serpent with her "and with a letter set you at work to come tempt your father again and for the favor that you bear him labor to make him swear against his conscience and so send him to the devil."

It was at this time that he emphasized very much the fact that everyone must make up his conscience for himself. We have the verbatim report of one of his conversations with his daughter that emphasized this position very strongly:

"Verily, daughter, I never intend to pin my soul at another man's back, not even the best man that I know this day living. For I know not whither he may hap to carry it. There is no man living of whom, while he liveth, I may make myself sure. Some may do for favor, and some may do for fear, and so might they carry my soul a wrong way. And some might hap to frame himself a conscience, and think that if he did it for fear God would forgive it. And some may peradventure think that they will repent and be shriven thereof, and that so shall God remit it to them. And some may be, peradventure, of the mind that, if they say one thing and think the while contrary, God more regardeth the heart than the tongue; and that, therefore, their oath goeth upon what they think and not upon what they say. But in good faith, Margaret, I can use no such ways in so great a matter."

In spite of this, Margaret still urged that he was not asked to swear against his conscience in order to keep others company, but instructed to reform his conscience by the considerations that such and so many men consider the oath lawful, and even a duty since Parliament required it.

Bridgett, in his "Life of Sir Thomas More," gives some details of the conclusion of the discussion that have a very human interest: "When he saw his daughter, after this discussion, sitting very sadly, not from any fear she had about his soul, but at the temporal consequences she foresaw, he smiled again and exclaimed: 'How now, daughter Margaret? What now, Mother Eve? Where is your mind now? Sit not musing with some serpent in your breast, upon some new persuasion to offer Father Adam the apple yet once again.'

"'In good faith, father,' replied Margaret, 'I can no further go. For since the example of so many wise men cannot move you, I see not what to say more, unless I should look to persuade you with the reason that Master Harry Pattenson made.' (It will be remembered that Pattenson was More's fool, now in the service of the Lord Mayor.) 'For,' continued Margaret, 'he met one day one of our men, and when he had asked where you were, and heard that you were in the Tower still, he waxed angry with you and said: "Why, what aileth him that he will not swear? Wherefore should he stick to swear? I have sworn the oath myself." And so,' says Margaret, 'have I sworn.' At this More laughed and said 'that word was like Eve too, for she offered Adam no worse fruit than she had eaten herself.'"

All the details of the scenes of his death have a deep interest of their own. He was ready to obey the King in everything, except where he felt his conscience was involved. When they came to ask him not to make a speech at his execution, because the King wished him not to, he thanked them very simply and said he was glad to have had the King's wishes conveyed to him and that he would surely obey them. He added that he had had in mind to say something, but that now he would refrain. When it was called to his attention that the clothes that he wore would fall as a perquisite to the executioner, and that therefore the worse he wore the less his loss, he asked if there was anyone who could do him a greater favor than the headsman was going to perform and that he would prefer to wear his best. He had actually donned them when it was represented to him by the Governor that this was a bad precedent to set, and then he changed them for others. He was the same, meek gentleman in everything, though it might be expected that his insistence on his conscience against that of all the others would mark him as an obstinate man absolutely immovable in his own opinions.

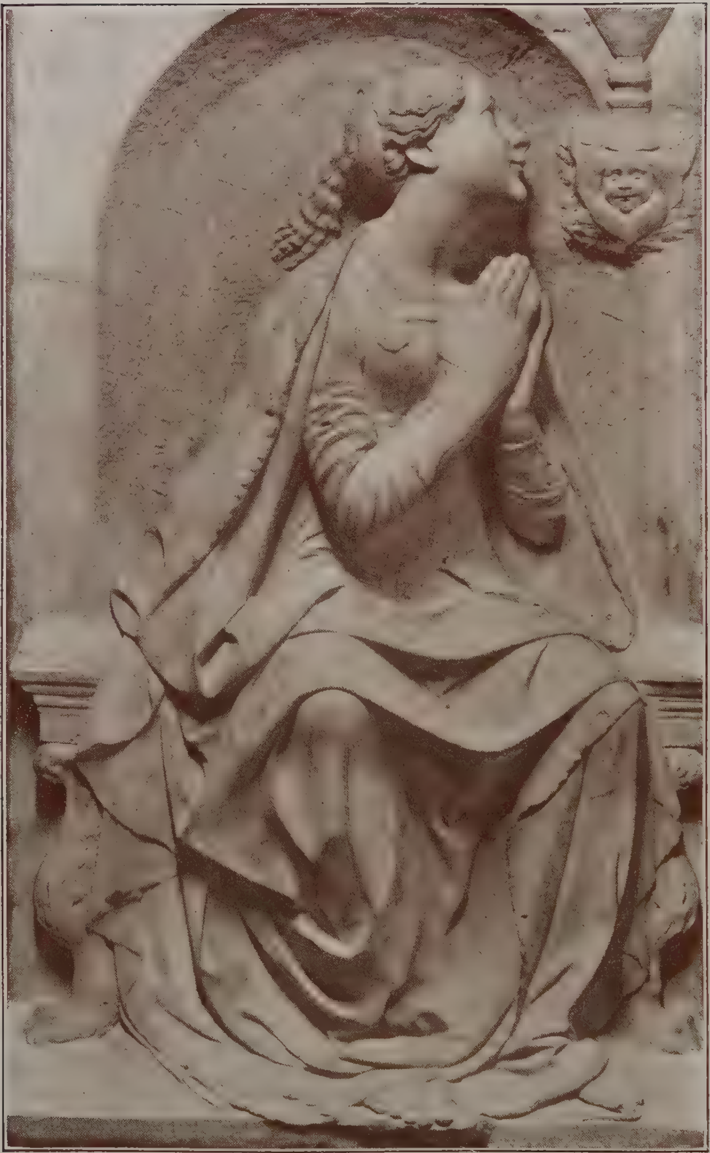
The humor that characterized all his life and that had so endeared him to his friends did not abandon him even to the very end. Twenty years before Erasmus had written about it, punning on the name, *Encomium Moriæ,* using the Greek word Moria for folly. Years and high office, serious persecution, bitter imprisonment, lofty decisions involving death all had not obliterated it. When he was about to ascend the scaffold the steps of that structure proved to be rather shaky, and he asked that he should be given a hand going up, though as for coming down he said he felt that he might be left to shift for himself. On the scaffold he commended himself to the headsman, gave him a present and then, as he was placing his head on the block, his beard, which he had been unused to wearing before he went to prison, coming on it he pushed it out of the way, saying "This at least has committed no treason." All the rest was silent communion with his God.

Thus died one of the greatest men of his race—great in intellect, in sympathy, in practical philosophy, great above all in character. *Totus teres atque rotundus.*

Of his execution Lord Campbell, in his "Lives of the Lord Chancellors of England," said: "Considering the splendor of his talent, the greatness of his acquirements, and the innocence of his life, we must still regard his murder as the blackest crime that has ever been perpetrated in England under the forms of law."

In closing his life of him in "The Lives of the Lord Chancellors," Lord Campbell, who had no sympathy at all with More's religious views and who is quite sure that the Reformation was a very wonderful benefit to England, declared:

"I am indeed reluctant to take leave of Sir Thomas More not only from his agreeable qualities and extraordinary merits, but from my abhorrence of the mean, sordid, unprincipled chancellors who succeeded him and made the latter half of the reign of Henry VIII the most disgraceful period in our annals."



MATTEO CIVITALE, FAITH (BARGELLO)

CHAPTER V

THE REFORMERS

During the last quarter of Columbus' Century, Europe was very seriously disturbed and the minds of men very much occupied with the movement which has come to be called in English-speaking countries at least the " reformation," though many historians now prefer to speak of it as the religious revolt in Germany during the sixteenth century. There is no doubt that this movement was due to the unrest—political, social and religious—which came over men at this time. The conquests in scholarship through the study of the Greek and Latin classics had awakened men's minds. The great achievements in art and architecture had still further aroused them to a sense of their own power. The introduction of Greek ideas into the modern world had brought about great developments in science. Columbus, largely influenced by classical studies, had initiated a movement that revolutionized men's thinking with regard to the earth on which they live. Copernicus, taught by men who were making commentaries on Ptolemy, saw farther than his masters and gave the world a new universe at this time. Physical science was developing and biological science, especially in all that relates to anatomy and physiology, was receiving a marvellous impetus. No wonder men felt ready for change.

Above all, a complete change in the basis of education influenced men deeply. For centuries education had occupied itself with science, and particularly the ethical sciences. Philosophy in its various aspects constituted the curriculum of the old universities. Metaphysics, logic, rhetoric, grammar, the ethical philosophies or, as we would say, sciences of the world, of thought, of speech, and of political and moral science, though of course also mathematics, music and astronomy, had been the subjects of special attention. Now men were trained by means of the classics, the New Learning, as it was called. Quite naturally they came to know so much more about these than their fathers had ever had the opportunity to learn and, above all, they had come to think these so much more important than anything that had been taught their fathers, that the rising generation were quite sure that they knew ever so much more than preceding generations had known. A corresponding state of mind developed in our own time when, as a consequence of the gradual replacement of the classics in university curricula by science, another generation arose educated very differently from its forefathers. What has come to be called modernism, which may be best defined as the feeling that we in the modern time know so much more than our forefathers did that we can scarcely be expected to accept complacently the philosophy and religion that satisfied them, is really an intellectual movement very similar to that which can be noted nearly everywhere during Columbus' Century.

The picture of it as drawn by Janssen, in his "History of the German People" (Vol. III, p. 17), can scarcely fail to attract attention, because of its anticipation of what are usually considered to be quite modern ideas. There was the same lack of respect for the older time, the same feeling that until their precious time men really did not know enough to be able to take any serious thought about the Church and Christianity, and the same tendency to make fun of practices of the older time simply because of failure to understand the spirit behind them. The passage is all the more interesting when it is recalled that nearly every one of the men who thus in his younger years was so sure of the failure of the Church in its mission came back in later life and recognized that without Christian unity, and even the dogmatism which earlier he had so contemned, there could be no real church. Janssen said:

"Erasmus did, however, seriously propose a revision of the doctrines laid down by the early Church. He was inclined to look upon the transactions, the controversies, and the doctrinal decisions of the christological period as the first step in the continuous deterioration of the Church. The Church had since then, he considered, departed from her 'ancient evangelical simplicity'; theology had become subservient to a casuistical philosophy, which in its turn had degenerated into the scholastic methods by which the actual ruin of Christian doctrine and Christian life had been brought about. During the whole of his literary career he waged war against this barren scholasticism with an acrimony that had no parallel, and its representatives were a butt for his ridicule and contempt. Ever since the domination of this scholasticism had set in, the whole Western world, he declared, had been subject to a spirit of Judaism and Pharisaism which had crushed the true life of Christianity and theology and perverted it to mere monastic sanctity and empty ceremonialism.

"The contempt for the Middle Ages as for a period of darkness and spiritual bondage, of sophistry in learning, and mere *outwardness* in life and conduct, originated with Erasmus and his school, and was transmitted by them to the later so-called reformers. Thanks to the high esteem in which Erasmus was held for his culture and scholarship, his ironical and calumnious writings against the mediæval culture, and against the influence of the Church and the traditions of Christian schools, passed for a long time unchallenged."

No wonder that a great many people felt that the religion and philosophy of life that had been quite good enough for their forefathers was not good enough for them, because they thought that they were so far above their forbears in all intellectual attainments. As a consequence, a great religious revolution that has disturbed Western Christianity ever since took place. Writers have viewed it from many and varying standpoints and have agreed to differ about its significance. The place accorded this revolutionary movement in history depends entirely on the writer about it. For some historians it was a great movement in human freedom and the origin of practically all the blessings of modern civilization. For others it was mainly a political reaction brought about by ambitious monarchs tempted by the idea of ruling Church as well as State and, above all, of enriching themselves by the confiscation of Church property. These two contradictory views are gradually being brought into some harmony. It has taken all the power of modern scientific and critical history, with the consultation of original and contemporary documents and the critical appreciation of these, to bring us a little nearer the truth. We are not yet in a position to see this clearly. But we are much nearer than ever before, and the future is most promising.

In the meantime, the only way that the reform movement can be treated concretely and objectively in its place in Columbus' Century is to consider it, as we have every other important phase of the period's activity, through the lives of the men who are the acknowledged leaders and prime movers in it. There are three who, though utterly out of sympathy with each other, are more responsible for the division of Western Christianity than any others. These are Luther in Germany, Calvin in France and Switzerland, and through Knox in Scotland, and finally Henry VIII in England. Undoubtedly all three of these men were of great force of character, possessed of a personality that enabled them to dominate others. Luther and Calvin were besides the masters of a vigorous style in the vernacular when that mode of expression was rare enough to make them a power over the masses of the people in their respective countries. Scholars had always used Latin for learned discussions of religious subjects up to this time, but now these were brought into the forum of popular debate through the use of the vernacular. Above all, every man was told that all he needed to do was read the Scriptures, interpret them for himself and make out his own religion without the necessity for submitting to any authority. Hallam declares that " it cannot be denied that the reform was brought about by stimulating the most ignorant to reject the authority of their Church," though he adds in comment that " it instantly withdrew this liberty of judgment and devoted all who presumed to swerve from the line drawn by law to virulent obloquy and sometimes to bonds and death."

Lord Acton once declared that the most difficult problem in historical writing would be to have a confirmed Catholic and a confirmed Protestant agree in the writing of the lives of the reformers, and especially of Luther. Very many lives of the three men we have mentioned have been written, and Lord

Acton's suggestion might well be repeated with regard to nearly all of them. In recent years, however, owing to the publication of contemporary documents consequent upon the opening of archives and the scientific development of history, it has been possible to get actual facts rather than opinions with regard to them and we are now probably in a better position to judge them and the movement with which their names and activities are so intimately connected than any generation since their time. As the editors of the "Cambridge Modern History" declared in their preface, "the long conspiracy against the revelation of truth has gradually given way." "In view of changes and of gains such as these (the printing of archives), it has become impossible for the historical writer of the present age to trust without reserve even to the most respected secondary authorities. While we cannot obtain ultimate history in this generation, conventional history can be discarded and the point can be shown that has been reached on the road from one to the other." These expressions are more true with regard to the history of the Reformation and the reformers than any other period and men.

All the generalized explanations of Luther's movement that used to be accepted as accounting for the Reformation and its progress have now been definitely rejected by the almost universal consensus of historians. The reaction began at least a generation ago. Hallam, in his "Introduction to the History of Literature," said:

"Whatever be the bias of our minds as to the truth of Luther's doctrines, we should be careful, in considering the Reformation as a part of the history of mankind, not to be misled by the superficial and ungrounded representations which we sometimes find in modern writers. Such as this, that Luther, struck by the absurdity of the prevailing superstitions, was desirous of introducing a more rational system of religion; or that he contended for freedom of inquiry, and the boundless privileges of individual judgment; or what others have pleased to suggest, that his zeal for learning and ancient philosophy led him to attack the ignorance of the monks and the crafty policy of the Church, which withstood all liberal studies. These notions are merely fallacious refinements, as every man of plain understanding, who is acquainted with the early reformers, or has considered their history, must acknowledge."

Recent historical investigation emphasizes more and more that the movement was not religious in any sense, except superficially, and that the forces that gathered behind Luther were political. There was the opportunity for reigning princes to become both the head of the Church and the State in their dominions and, above all, to get possession of the property of the Church and share it with the nobility or creatures of their own, thus strengthening their hold upon the government and securing extension of power. We know in our day the all-persuasive power of political graft and how it saps honesty and corrupts character. Everywhere the track of it can be followed readily in the Reformation period.

Luther was not only the first but the most important of these reformers. There has been more controversy over the true import of his work than that of any of the others. He was undoubtedly the leader through whom the religious revolution of this period was brought about. He had had predecessors, but the work of none of them had anything like the significance of his. Within the past ten years his history has been revolutionized. Denifle, the great historian of the mediæval universities, by publishing all the documents that show the worse side of Luther's character created a great commotion in Germany. Grisar's later life of the reformer is, in accordance with the traditions of his order, much more irenic, yet makes it very clear how many of the very generally accepted favorable impressions with regard to Luther are contradicted by the many lately unearthed materials with regard to his life now available. Only those who have read these books can have any pretence to know the realities of the history of the religious revolt in Germany, though even these probably must not be considered as representing ultimate truth.

With regard to Luther and the other reformers, as well as the significance of the whole movement, I have preferred to quote only Protestant authorities in order to avoid the almost inevitable bias of my own educational training and environment. Even thus I can only hope to give an approximately impartial discussion of these men whose work as I see it did more to hurt human development in every line of thought than anything else in modern history.

The story of Luther's early life, of the unhappiness of his home, of the sudden death of his friend which made him turn from a career at the bar to enter the monastery, all tend to show him by heredity and personal character as a man of strong impulses ruled by them. There is no doubt at all that during the early years of his career as a monk Luther was happy and that the stories of his unhappiness are founded on inconsiderate expressions of his own in later life, which are contradicted by documents written in his earlier years. The doctrine of indulgences, against which he inveighed so vigorously, is as eminently open to abuse as religion itself—and had undoubtedly been abused in his time, but the teaching of the Church on the subject remains exactly what it was in Luther's day and before it, yet has been accepted by the intelligent members of the Church ever since. Converts like Newman or Manning, not to mention many others of our time, find no difficulty at all in accepting it, once they understand it. The Protestant arguments founded on it are due entirely to misunderstanding of the true significance of the Church's position in the matter. Only those who *will* not cannot understand it. Luther's declaration that he found the doctrine of indulgences too hard to comprehend is shown to be one of those interesting ideas as to his earlier career that developed in his mind in all sincerity in later life, but which are contradicted by his own writings, for there is from him an admirable sermon on the subject of indulgences which contains an excellent exposition of the Church's teaching.

Luther gradually developed into one of the men so common in the world's history who are quite sure that the world is wrong in nearly everything and that they are born to set it right. They believe thoroughly in themselves, they have a great fund of energy to draw on, they usually have strong powers of expression and there are a large number of people waiting to be led by them and not a few quite willing to take advantage for their own purposes of the movement that the restless create. It is well understood now that the great majority of men do not think for themselves, but stand ready to accept other people's thoughts, and often are more willing to carry out such thoughts to their logical conclusions, or at least to try to fit them to practical life, than are the original thinkers. The fate of a generation depends on whom it chooses as its leaders. Unfortunately, the choice is not often quite voluntary, but is forced on men by conditions, or they are imposed upon by the genius appeal of the leader, and sometimes even more by those who gather round him at the beginning of a movement and help to give it momentum.

Luther's relations with Zwingli, the Swiss reformer, show more clearly than anything else the character of the reformer, his assurance of his divine mission and his absolute confidence that he has a Heaven-directed mission. Zwingli would not agree with Luther's interpretation of the doctrine of the Last Supper. They proceeded to anathematize each other, and when induced by friends they met at a conference, each claimed the victory in the argument. The Zwinglians seem, indeed, to have recognized the force of Luther's contentions, but dared not yield entirely, and when they returned to their homes Zwingli spoke very contemptuously of his antagonist's arguments and loudly claimed that he had completely vanquished him. This drew from Luther some bitter denunciations, and among other things Luther wrote to Jacob Probst of Bremen as follows:

"In boasting that I was vanquished at Marburg the sacramentarians act as is their wont. For they are not only liars, but falsehood, deceit, and hypocrisy itself, as Carlstadt and Zwingli show both in deeds and words. They revoked at Marburg, as you can see from the articles drawn up there, the things hitherto taught in their pestilential books concerning baptism, the use of the sacraments, and the preaching of the word. We revoked nothing. But when they were conquered also in the matter of the Lord's Supper they were unwilling to renounce their position even though they could see it was untenable, for they feared their people, to whom they could not have returned if they had recanted."

He never forgave Zwingli, and when some time later the Swiss reformer, acting as a chaplain to the Swiss Protestant Army in a battle with the Swiss Catholic cantons, was killed, Luther pronounced this event a special dispensation of Providence. He was fully persuaded that the special spirit of prophecy had come down over him and that he had been inspired to denounce Zwingli and to declare that his doom was not far off. After the news of Zwingli's sad, untimely end, he wrote to his friend Link:

"We see the judgment of God a second time—first in the case of Münzer, and now of Zwingli. I was a prophet when I said, God will not long endure these mad and furious blasphemies with which they overflow, laughing at our God-made bread, and calling us carnivora, savages, drinkers of blood, and other horrible names."

This exaggeration of his own importance and conviction of his intimate relations with the Deity became more and more manifest as time goes on. The spectacle is not at all unfamiliar, though it is usually pathological, and the surprise always is how many followers such characters are able to gather around them at any time in the history of the race. It is this aspect of Luther's life and the psychic development of his career that have attracted the special attention of historians in recent years and received ample illustration from hitherto unused original documents.

Some of the recent studies of Luther, written by those who are making out just as good a case as possible with all the contemporary information that now is available, have some very illuminating passages as to the character of the reformer, who has been traditionally set up as a great religious leader. For instance, the explanation of how Luther came to permit the Landgrave Philip of Hesse to take a second wife is very disturbing to those who think of him as a reformer of religion. McGiffert, in his "Martin Luther, the Man and His Work" (New York, 1912), has much to say with regard to the permit undoubtedly granted not only by Luther, but also by Melanchthon for this bigamy, and then the proposed denial of the marriage, which is, if possible, more disturbing to the modern world than the permit itself. McGiffert said (p. 364):

"The proposed denial of the marriage, which seems to throw so sinister a light upon the whole affair, Luther justified somewhat sophistically by an appeal to the traditional maxim of the inviolability of the confessional, requiring the priest, if necessary, to tell an untruth rather than divulge its secrets. He justified it also by the more fundamental principle that the supreme ethical motive is regard for our neighbor's good, and it is better to lie than to do him harm. To this principle, taught not by a few ethical teachers of our own as well as other ages, he gave frequent expression."

McGiffert, with all his obvious effort to defend Luther, frankly finds this whole incident too much. He said (p. 366):

"Regarded from any point of view, the landgrave's bigamy was a disgraceful affair, and Luther's consent the gravest blunder [!] of his career. He acted conscientiously [!], but with a lamentable want of moral discernment and a singular lack of penetration and foresight. To approve a relationship so derogatory to the women involved, and so subversive to one of the most sacred safeguards of society, showed too little fineness of moral feeling and sureness of moral conviction; while to be so easily duped by the dissolute prince was no more creditable to his perspicacity than thinking such an affair could be kept secret to his sagacity."

The same biographer has summed up the closing years of Luther's life, from which we have so many records in the shape of letters and documents of various kinds. As McGiffert says: "There is little sign of flagging powers in his later writings. The same Luther still speaks in them with all the racy humor, biting satire and coarse vituperation of his best days." He continues (p. 373):

"Despite the multiplicity of his occupations, his closing years were far from happy. As time passed, he became more censorious, impatient and bitter. He seems to have been troubled less frequently than in earlier life with doubts as to his own spiritual condition and divine mission, but he grew correspondingly despondent over the results of his labors and the unworthiness of his followers. Instead of finding the world transformed into a paradise by his gospel, he saw things continuing much as before, and his heart grew sick with disappointment. The first flush of enthusiasm passed, and the joy of battle gone, he had time to observe the results of his work, and they were by no means to his liking.

"Conditions even in Wittenberg itself were little to his liking. In this centre of gospel light he felt there should be a devotion and purity seen nowhere else. Instead, as the town grew in size and importance, and manners lost somewhat of their earlier simplicity, it seemed to his exaggerated sensibilities that everything was going rapidly to the bad."

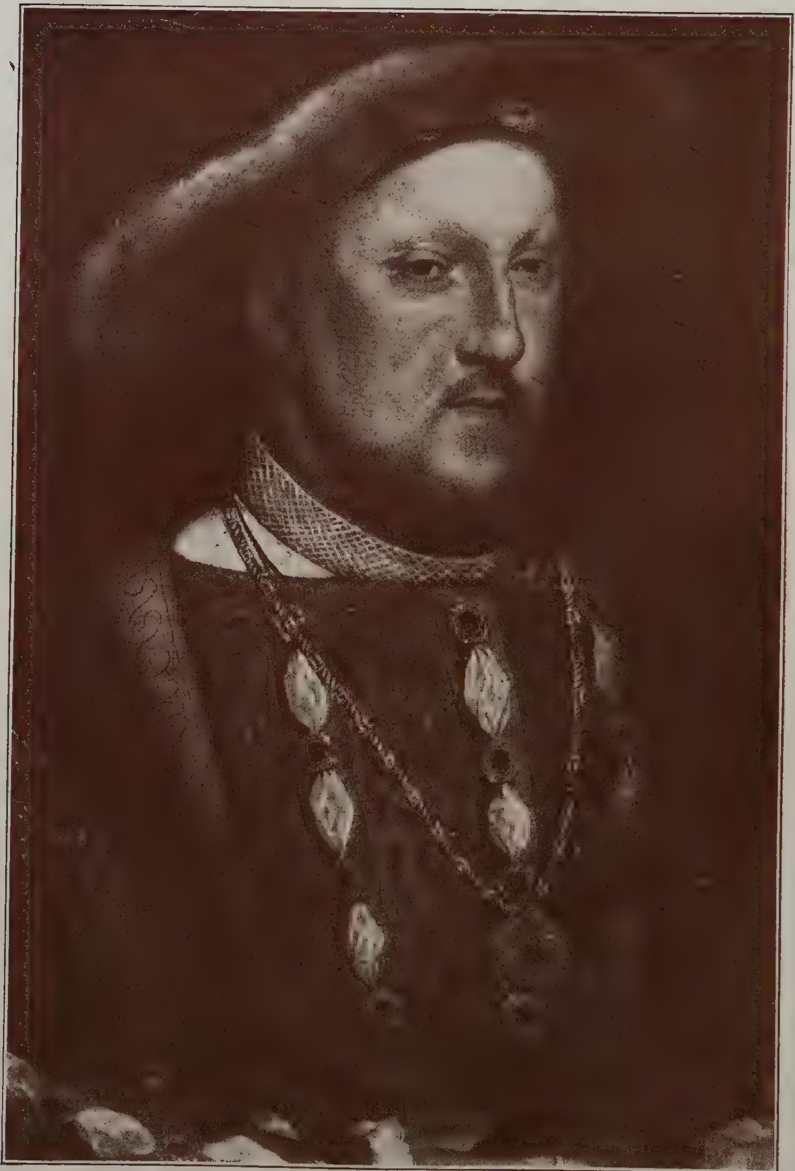
Calvin, like Luther, was another of these vigorous active spirits so common in this time of the Renaissance who felt that he had a special call from on High to teach the world doctrines very different from those received before. Like Luther, he too used his native tongue in speech and writing with a forcefulness and originality that makes him one of the founders of the prose of his language. From his earliest youth of a very serious disposition, caring nothing for the games and sports in which his fellow-scholars indulged, shunning society and its pleasures, and prone to censure anything that was not deeply serious and to condemn everything that smacked of frivolity, he found abundant opportunity for reform. Severe to himself in the highest degree, relaxation seemed almost sinful. He insisted that others should follow the same régime and imputed even the ordinary amusements of life to sin. He was lacking entirely in that disposition for healthy, happy and hearty amusement which is a sign of good health of mind and body and the best possible proof of absolute sanity. The old Church had encouraged the recreations and amusements of the people. Calvin made it a cardinal principle of religion that there were to be none of them. He is probably no more to be held responsible for this, since it was due to the lack of something in him, than is the color-blind person for failure to perceive colors.

Poor Calvin, with no faculty for relaxation, insisted that others should not indulge theirs, and made it the basis of his religion that any such indulgence was sinful. From this to the doctrine of predestination to eternal punishment was not difficult. A God who meant life to be passed without recreation would surely not scruple to condemn most of His creatures quite without their own fault to an eternity of punishment. Why is it when men make their gods they make them worse than themselves? Even the wise Greeks did not escape this pitfall.

There are always a number of people who are ready to follow anyone who announces any doctrine, no matter how unreasonable it may seem to be, if only he insists emphatically on his belief and if he evidently is a sincere believer in it himself. Calvin was one of the dominant spirits who readily gain control over others, and his severity to himself won many of the sombre people around him to a devotion to his cause that partook of worship. They even permitted themselves to be ruled by his rigid hand, and there probably never has been a place where less allowance was made for human nature than at Geneva during the days when Calvin ruled there with a rod of iron and when his particular mode of the reformation of religion was so completely accepted. To the dour Scots this austere doctrine appealed particularly, and Calvin's disciple, Knox, secured almost as much authority in Edinburgh as did his master down at Geneva.

Like Luther, Calvin before the end of his life was profoundly disillusioned with regard to the Reformation and its effect upon mankind. The unfortunate divisions of the Protestants among themselves, their readiness to persecute each other, their refusal to permit anything like religious toleration, above all their rejection, except for very limited numbers, of his own doctrines, made him foresee nothing but evil for the future. He knew that he had stirred mankind deeply in the West of Europe, but he could not foretell anything but unfortunate results from the conditions that he saw around him. He once said: " The future appals me. I dare not think of it. Unless the Lord descends from heaven, barbarism will engulf us."

The blot on Calvin's name through the execution of Servetus has been extenuated by his adherents, but the certainty of his complete hostility to the unfortunate physiologist, who insisted in dabbling in theology at a dangerous time, is now settled. Long before Servetus' execution at Geneva, Calvin actually secured through his well-developed system of espi-



HOLBEIN, HENRY VIII (LONDON)

onage and delation, extending even into Catholic countries, the persecution of Servetus by the Catholic ecclesiastical authorities in France. The details of this have now been traced very clearly. When Servetus, thinking to find protection where freedom of interpretation of Scriptures was preached, came to Geneva his fate was sealed. Calvin himself made it a personal matter to secure his conviction and bring about his execution. A number of the reformers are on record agreeing that Calvin's action in this case was eminently right, and even the gentle Melanchthon would not condemn it. Nothing makes so perfectly clear as this that the claim made for the Reformation of fostering or encouraging liberty of thought is founded entirely on a misconception of what the reformers were trying to do. The reformers wanted liberty of religious thinking for themselves, but they were not ready to grant it to others. After all, we in America do not need to appeal to foreign history in order to understand that very well, for the Puritan disciples of Calvin, driven out of England by Anglican religious persecution and intolerance, made a home for themselves in New England, where they practised the bitterest intolerance and absolutely refused to allow anyone to live in their communities unless he or she, as Ann Hutchinson learned to her cost, conformed unquestioningly to their religious tenets and practices.

The history of Henry VIII has less in it to make historians disagree. His uxoriousness represents the explanation of the revolutionary changes that took place in the government and the religion of England. He fell in love with a younger, handsomer woman than the elderly wife, who for more than twenty years had been, as he confessed himself, his faithful, loving spouse, and then his first marriage got on his conscience. The succeeding marriages are the best commentary on this explanation. His father, Henry VII, had left him a full treasury, and the son had spent liberally during the early years of his reign, and finally the famous Field of the Cloth of Gold had almost exhausted the crown's resources. Many a nobleman had literally carried his estates on his back and returned from France so heavily mortgaged that the power of the nobles was broken. This made most of them thoroughly dependent on the King. When the trouble with the Church came then, the King himself and most of the nobles were rather glad of the opportunity to obtain possession of the Church properties, the estates of the great monasteries, and the many foundations for charitable and social purposes that existed in connection with Church societies. All of these might well be brought under the law of the confiscation so as to fatten the Royal treasury, or at least fall to an expectant sycophantic nobility.

The question that many have been unable to answer satisfactorily for themselves is how could the religion of a whole people be taken from them under such sordid circumstances if they really held it. It has been supposed that the change was made possible only by the fact that for centuries there had been a growing feeling in England of opposition to a foreign spiritual ruler, the Pope, and that this culminated in Henry VIII's time and enabled him to assume the headship of the English Church. James Gairdner has, however, dispelled this idea completely, though himself an Anglican, and like Augustus Jessop continuing in his adherence to the English Church. He shows in his book on Lollardism that there was no widespread growing feeling of opposition to Rome, and that while of course occasionally, when there were difficulties between the crown and the Pope, mutterings of spiritual insubordination were heard, which took the form expressed by Shakespeare through the mouth of King John in his play, these were but temporary and individual and not at all a growing sentiment of wide diffusion. England up to Henry's time had been one of the most faithful countries of Europe in the support of the Papacy, and continued to be so until the change actually came.

As a matter of fact, the people of England were deprived of their religion by fraud at first, and then by violence. They did not change it voluntarily. They were deeply attached to their church and clergy. Augustus Jessop, in his book "Before the Great Pillage," has told the story of the clergy before the reformation. He said: "Take them all in all I cannot resist the impression which has become deeper and deeper upon me the more I have read and pondered, that the parochial clergy in England during the centuries between the Conquest and the Reformation numbered amongst them at all times some of the best men of their generation." He reëchoes Chaucer's picture of the village parson who "did as well as taught." Jessop adds: "Not once, nor twice in our history these parish priests are to be found siding with the people against those in power and chosen by the people to be their spokesmen when their grievances were becoming unbearable." As to the pretended corruption of the monasteries, that has been disproved by all the careful investigation of recent years, until it has become perfectly clear that the abuses were no greater than may be expected at any time, since men are only human. The evidence for corruption was very slight, and what there is was manifestly gathered in such a way as to enable the government authorities to justify their settled purpose to confiscate the property. It was the need of money that was important.

Nearly a century ago Cobbett, in his "History of the English Reformation," had found it almost impossible to select words quite strong enough to express his feeling with regard to the people who brought about the English reformation. His expressions were considered at that time as grossly exaggerated and the result of his tendency to use strong language. In our time they still remain radical in mode, but most writers now agree as to the essential truth of the facts on which they are based. When it is recalled that millions of people have for centuries thought of the Reformation as one of the greatest blessings to mankind and the source of nearly every good that we have in the modern time, it is indeed startling to read Cobbett's words, yet Cobbett had made a special study of his subject, he was a great practical-minded investigator, who knew his historical sources well, who had gone directly to them and who had been shocked by the difference between ordinary impressions as fostered for religious and political purposes by historians and the realities that he found. No wonder that he burst forth in his strong way:

"The Reformation, as it is called, was (in England) engendered in beastly lust, brought forth in hypocrisy and perfidy, and cherished and fed by plunder, devastation and rivers of innocent English and Irish blood."

Macaulay described the character of those who were most responsible for the change of religion, the so-called reformation in England, in words that are passing strange, considering that he himself would never think of submitting to "the yoke of Rome," and seems even to have felt that a great good had been accomplished, though by such vile means. He says, in his "Essay on Hallam's Constitutional History," that the reformers were:

"A king whose character may be described best by saying that he was despotism itself personified; unprincipled ministers; a rapacious aristocracy; a servile parliament. Such were the instruments by which England was delivered from the yoke of Rome. The work which had been begun by Henry, the murderer of his wives, was continued by Somerset, the murderer of his brother, and completed by Elizabeth, the murderer of her guest."

Some of the most unworthy motives and adjuvants were mixed up in the reform movement. Indeed, it is possible to collect from non-Catholic sources more bitter excoriations of the men who made the Reformation possible than with regard to almost any group of men who accomplished any other purpose in history. Frederic Harrison, for instance, said: "It is not to be denied that the origin of the (English) Establishment is mixed up with plunder, jobbery and intrigue, that stands out even in the tortuous annals of the sixteenth century; that the annals run black with red, along some of the blackest and reddest pages of royal tyranny and government corruption."

Andrew Lang quotes Professor F. York Powell in a description of how the reformation in Scotland was brought about in language that is, if possible, stronger than this of Frederic Harrison: "The whole story of Scottish Reformation, hatched in purchased treason and outrageous intolerance, carried on in open rebellion and ruthless persecution, justified only in its indirect results, is perhaps as sordid and disgusting a story as the annals of any European country can show."

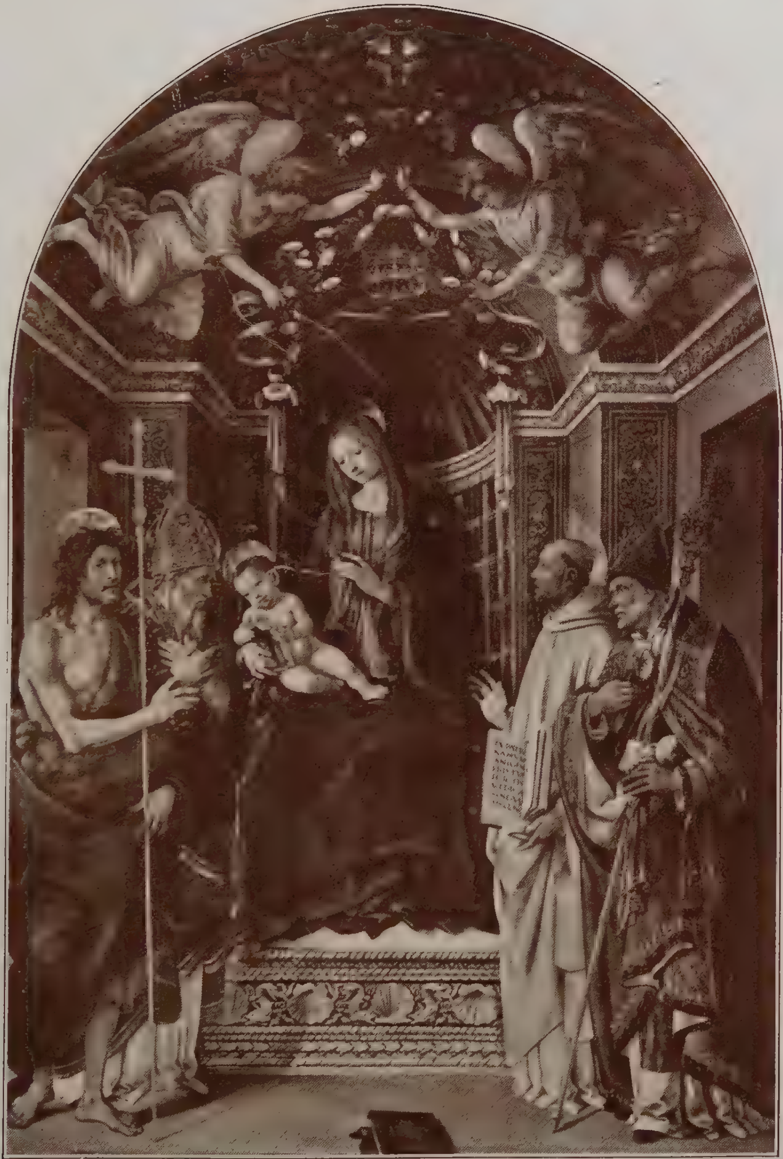
Almost needless to say, though the Reformation was a religious movement and therefore might be expected to be intimately associated with personal holiness on the part of its leaders, probably no one would think for a moment of suggesting the title of saint for any of those whose names are most prominent in the movement. To John Wesley, who came two centuries and a half later, the name saint might readily be attributed. He was one of those kindly characters, thoughtful for others, thoughtless of himself, thoughtful especially of the poor, whose personal winningness meant much for his cause. The reformers of the sixteenth century, however, were egoistic leaders of men, with the self-consciousness of a great purpose and determination to put that through regardless of the suffering of others involved in it. There was little that was sympathetic about them, though all of them had certain compelling qualities of mind but not of heart which won men to them. Saintliness of character, in the ordinary acceptation of the word, would scarcely be thought of even distantly in connection with them. All of them were fighters, and if others suffered in the conflict they cared little, for they felt that they were in the right and must do the work of the Lord cost what it might. It is no wonder that in our own time Professor Briggs of the Union Theological Seminary, New York, whose own religious experience must have been so illuminating for him, reviewing the Reformation period, has suggested that there were other and more saintly reformers alive at this time whose influence unfortunately was not strong enough to turn the tide of revolution once it had begun.

In an article in the *Independent* (New York) entitled "How May We Become More Truly Catholic," Professor Briggs said:

"There were other and in some respects greater reformers in the sixteenth century than the more popular heroes Luther, Zwingli and Calvin. Sir Thomas More, the greatest jurist of his time, Lord Chancellor of England, a chief leader of reform before Cranmer, resigned his exalted position and went to the block rather than recognize the supremacy of the King in ecclesiastical affairs; a true knight, a martyr to the separation of civil and ecclesiastical jurisdiction. Erasmus, the greatest scholar of his age, regarded by many as the real father of the Reformation, the teacher of the Swiss reformers, was unwilling to submerge learning and morals in an ocean of human blood. He urged reformation, not revolution. He has been crucified for centuries in popular Protestant opinion as a political time-server, but undoubtedly he was the most comprehensive reformer of them all.

"John von Staupitz, doctor of theology, and Vicar-General of the German Augustinians, the teacher of Luther and his counsellor in the early stages of his reform, a man without a stain and above reproach, a Saint in the common estimation of Protestant and Catholic alike, the best exponent of the piety of his age, was an Apostle of Holy Love and good works, which he would not sacrifice in the interests of the Protestant dogma of justification by faith only. These three immortals who did not separate themselves from the Roman Catholic Church, who remained in the Church to patiently carry on the work of reform therein—these three were the irenic spirits, the heroic representatives of all that was truly Catholic, the beacons of the greater reformation that was impending."

This position taken by Professor Briggs has come to be more and more recognized as the true one from the historical standpoint in recent years. What has been called the Reformation had in it so many unfortunate political elements that its force for good was frittered away by the abuses inevitably connected with political associations. The counter-reformation, which represented the reaction from the religious revolt of the early sixteenth century, carried with it the truer spirit of Christianity and gradually gathered round it those forces for culture, social uplift and political liberty which mean most for the benefit of mankind and which thrived so well under the fostering care of Christianity. It is only with the breaking up of the ideas and institutions fostered by the reformers that modern progress along these lines has come. Protestantism hurt art, sadly hampered education, ruined architecture, shackled philosophy, discouraged scholarship and, above all, destroyed educational and humanitarian foundations for mere personal profit, and took away the incentive for true charity, its doctrine of salvation by faith only obliterating



FILIPPINO LIPPI, MADONNA WITH FOUR SAINTS

the divine significance of good works. In the Appendix, some of these points are emphasized by quotations from well-known authorities, who have summed up various phases of Reformation influence. These writers, though themselves in sympathy with the reform movement in its ideals, see its evil effects and lament them.

CHAPTER VI

GREAT EXPLORERS AND EMPIRE BUILDERS

Columbus was not the first great successful explorer of this century that we have called by his name. Many daring navigators, particularly during the half century preceding the discovery of America, had braved the perils of the ocean, so literally trackless for them, in order to add to man's knowledge. A great stimulus to the spirit of navigation and exploration came with the rediscovery of the Cape Verde Islands by the Portuguese in 1447. Men dared after this to sail with the definite purpose of finding hitherto unknown land, and their bravery was rewarded in 1460 by the discovery of Sierra Leone. Prince Henry of Portugal then realized that the future of his country, hemmed in as it was in Europe, would largely depend upon the success of her navigators. He gathered together and systematized all the knowledge obtainable in nautical matters, and well deserves the name of Henry the Navigator. It was under his inspiration that the coast of Africa and the Senegal and the Gambia were explored. Probably no one more than he helped to remove the imagined terrors of the deep and gave men courage to venture ever farther and farther in exploration. His great purpose was the spread of Christianity, and to this he brought every incentive from patriotism and every possible help that could be obtained from science in any way. His name gloriously opened Columbus' Century.

It is possible that the old tradition that Henry established a college of navigation and even, as some have declared, an astronomical observatory at Sagres, near Cape St. Vincent, with the special purpose of making observations on the declination of the sun so as to secure more accurate nautical tables, may be a pious exaggeration of ardent admirers. Undoubtedly, however, he did a great deal for the scientific development of navigation and established a tradition that was well followed in Portugal. John II of Portugal appointed a commission on navigation consisting of Roderick and Joseph, his physicians, and Martin of Bohemia. They invented the astrolabe, though the cross staff continued to be used for some time by navigators and was one of the few instruments possessed by Columbus and Vasco da Gama. Martin Cortez described the astrolabe and shows how much more convenient it is than the cross staff for taking altitudes.

During the latter part of Columbus' Century, the Portuguese made a series of magnificent discoveries. In 1486 King John II appointed Bartholomew Dias as the head of an expedition whose purpose was to sail around the southern end of Africa. Henry the Navigator had been attracted by the story of Prester John, the legendary Christian king of Abyssinia, who was said to rule over a large part of Africa. The Christian monarchs of the West hoped to get in touch with him. Recent reports had arrived apparently confirmatory of the tradition, and the Portuguese under King John wanted to enter into friendly relations with them. Dias sailed in 1487, reached the mouth of the Congo, which had been discovered the year before, followed the African coast, entered Walfisch Bay and erected a column near the present Angra Pequeña. He was driven by a storm then far to the south, but after the storm sailed easterly and, turning northward, he landed in Mossel Bay. He followed the coast as far as Algoa Bay and the Great Fish River. On his return he discovered the cape and gave it the name of *Cabo Tormentoso* (Stormy, Dangerous Cape), but on his arrival home King John proposed the name it still bears—the Cape of Good Hope—with the desire apparently of dissipating, if not its dangers, at least the dread of them that so filled men's minds. After this it was a comparatively easy matter to reach India, at least Dias had shown the way, and the problem which had occupied Prince Henry of joining the East and the West, so that the peoples might learn to exchange their riches, the costly materials of the East and the religious treasures of the West, was solved.

The great Portuguese Empire in India is an example of empire building under the most difficult circumstances, which shows the energy and the enterprise, the courage and the successful achievement of the men of this period. India was a very long distance from Portugal in those days. To think of sending out a colony, the men for which had to make the long voyage around the Cape of Good Hope with all its dangers, was a daring thought reaching almost to hardihood. In the course of a single generation, however, that empire became a wonderful source of added power and income to the mother country. Bartholomew Dias more than any other accomplished this for Portugal, but there were a large number of men of bravery and high administrative ability who helped in the work. Portugal had the advantage at this time of producing a supremely great poet, Camöens, who could celebrate the work of his fellow-countrymen and immortalize the story of their achievement. Nearly always the poet comes when a work worthy of his genius has been accomplished. India proved to be a school of courage and enterprise for the Portuguese of that generation, which lifted a little country (the smallest of Europe) to almost the highest plane of influence and greatness.

While Columbus' great discovery has overshadowed the work of all the other explorers and navigators in the Western Ocean at this time, it must not be forgotten that during this century a large number of hardy, heroic men, with a determination not due to ignorance or to mere foolhardiness, but with purposes as sincere and courage as high as our Arctic explorers, accomplished wonderful results in the enlargement of human knowledge of the Western Continent and its inhabitants and varied products. Even before Columbus himself had reached the American continent, Amerigo Vespucci as well as the two Cabots had already touched it. Vespucci's biographers insist that his first voyage to America was made in 1497 and that he coasted along the northern shore of South America and into the Gulf of Mexico, returning to Spain November 15, 1498. It was in this latter year that Columbus first touched the mainland. In 1499 Vespucci went out with a second fleet and, keeping his former course, he succeeded in reaching the mouth of the Orinoco River, and returned to Cadiz in 1500. He made a third voyage in 1501 and reached as far south as 52° of latitude, having coasted the South American shore from 5° south latitude to within 4° of Cape Horn. The fourth voyage was undertaken the next year, and on this Vespucci explored portions of the coast of Brazil. While it is usually said, and it must be confessed with some justification, that Columbus was deprived of what may be considered his proper privilege as first discoverer in not having the continent of America named after him, there is no doubt that Vespucci deserved highly of mankind for his daring explorations and his expert seamanship and hardy navigation. The scientific world owes him still more for the publication of his maps and detailed description of the American coast. These served to spread widely definite knowledge with regard to the new continent. Above all others, with the single exception of Columbus, even if that exception must be made, he deserved to have the Continent named after him.*

While we are not likely to think of the Italians as a seafaring people, Columbus himself is an Italian, so was Amerigo Vespucci, but still more remarkable the other greatest navigators of the first half of Columbus' Century, the Cabots, were also of Italian origin. John and Sebastian Cabot were Venetians, settled at Bristol, and they reached the continent of

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*The news of Amerigo Vespucci's discovery seems to have spread rapidly throughout Europe and his writings became familiar within a few years to a much greater number of people than we would think possible in the limited means of communication at the time. In discussing "The Four Elements," the Morality Play, in the chapter on English Literature lines are quoted to show that the play was written within twenty years of the discovery of America. Ordinarily it would be assumed that this would mean Columbus' discovery in 1492, but the whole passage shows that the reference was to Amerigo's, in Latin Americus', discovery of the Continent. The complete passage is:

"Till now, within this twenty years,
Westward he found new lands,
That we never heard tell of before this
By writing nor other means.
But this new lands found lately
Been called America, because only
Americus did first them find."

North America in 1498 and sailed for a considerable distance along it. It was on their discoveries that England based its claims to the North American portion of the hemisphere. Their merits as bold and fearless, yet intelligent, navigators have rightly been given the highest recognition. Owing to their connection with North America, we have known much more about them than about many of the others who ventured to make long, perilous voyages of discovery about this time.

The great Portuguese discoverers after Bartholomew Dias are Vasco da Gama (c. 1460-1524) and Magellan (1470-1521), almost exactly his contemporary. Vasco da Gama, who had proved his intrepidity as a mariner often before, was entrusted with the fleet of four vessels sent out by the Portuguese in July, 1497, in order to determine whether the story of Bartholomew Dias, that it was possible to sail around the continent of Africa and thus reach India, was true or not. He touched at St. Helena Bay, rounded the Cape of Good Hope and on the 20th of May, 1498, arrived at Calcutta on the Malabar coast. On his return he was magnificently received by the King, and three years later he was sent out with a larger expedition which took possession of India and created the Portuguese Indian Empire. At this time, in spite of rich rewards, he was evidently distrusted by the King, who apparently feared his ambition, and for twenty years he lived in retirement. After that he was called from his seclusion and created Viceroy of India. Unfortunately, his career as Viceroy lasted but a few months, yet even in that short time he had succeeded in correcting many abuses and reëstablishing firmly Portuguese authority in India. Da Gama had the good fortune to be celebrated in an immortal epic by Camöens, and it is the tribute of the great poet almost more than his own achievement that has given him high distinction among the many great navigators of his time.

One of the greatest of the explorers of this time was undoubtedly Da Gama's compatriot and contemporary, Ferdinand Magellan. He had been in the service of the king of Portugal, but as his services were unappreciated he went over to the king of Spain and succeeded in persuading the Spanish Government that the Spice Islands could be reached by sailing to the West. The Portuguese had previously reached them by sailing East. Magellan's idea was to find some mode of getting through or around the American continent so as to sail into the great South Sea. He reached the land to which he gave the name of Patagonia, where he noted the presence of men of huge size. South of this he succeeded in finding a passage which he called San Vittoria Strait, but which has come much more properly to be known since as the Straits of Magellan. He shed tears of joy, as Pigafetti who was with him on the expedition tells, when he beheld the immense expanse of the new ocean. He found it so placid that he gave it the name it has borne ever since, the Pacific Ocean. For nearly four months he sailed on the Pacific without seeing any inhabited land. His sailors were compelled to eat even the skin and leather wherewith their rigging was bound and to drink water which had become putrid. It required superhuman courage and perseverance to continue the expedition, but Magellan did so. He touched at the Ladrone Islands, but unfortunately he was killed shortly after his vessels reached the Spice Islands, it is presumed by the natives, though perhaps by his own men, who dreaded his intensity of purpose to circumnavigate the globe and feared that it would carry them once more through similar awful sufferings to those which they had experienced in the voyage through the Pacific Ocean.

His lieutenant, Sebastian de Elcano, directed his course from the Moluccas to the Cape of Good Hope, but did not reach it until he had gone through hardships almost as severe as those suffered in the Pacific. He lost twenty-one of his men, but succeeded in getting back to Seville just about three years and one month after they had sailed from that port. They had accomplished, however, one of the greatest achievements in the history of the race. They had circumnavigated the globe and proved beyond all doubt that by sailing westward one might come round to where one started. It is interesting to know that Magellan's lieutenant, Sebastian, received high honors and armorial bearings, with the globe of the world belted by the inscription, "You were the first to go round me" (*Primus circumdedisti me*). Spain made many claims to lands discovered on this expedition and it added notably to the extent of the Spanish Empire.

The French scarcely more than the Italians are thought of as great navigators. We are likely to reserve that designation for the Spaniards, Portuguese and English, yet next in point of priority at this time there are records of some magnificent French accomplishments in navigation. We have an account of a voyage by Paulmier de Gonneville, a French priest, the evidence for which rests on a judicial statement made before the Admiralty in France, July 19, 1505. De Gonneville called the large island that he discovered Terre Australe, so that for a long time it was thought that he was the first to touch Australia. The description that he gives, however, of the people and the products of the country evidently applies to some northern island of the Indian Ocean and not to the great southern continent. There is good reason to think, however, that in this voyage important discoveries were made. A little later in the century, Verrazano, an Italian in charge of a French expedition which sailed along the coast of North America, entered the harbor of New York, sailed up the Hudson River and landed an expedition on Manhattan Island, where in 1524 a religious service, probably the Mass as Rev. Dr. Morgan Dix suggested, was celebrated. Bennett's discussion of the matter in his "Catholic Footsteps in Old New York" (New York, 1910) leaves little doubt of the fact.

Two Spanish expeditions probably reached Australia during the first half of the sixteenth century. The first of these was under Alvar de Saavedra, who was sent out by Cortez. Cortez, having settled himself in Mexico, wished to get in touch with the East, and especially the Spice Islands, and it was he who despatched Saavedra, who was a relative. There is some doubt as to whether this navigator did not touch New Guinea rather than Australia, but there is no question but that he navigated across the Pacific Ocean as early as 1528. In 1542 Bernard della Torre is reported to have landed on the Australian continent, and critical analysis of his description of the natives and of the conditions that he found there puts his discovery beyond all doubt.

The men who were leaders of expeditions to the newly discovered countries at this time were all of them distinguished for bravery, and most of them for high administrative ability and a talent for government and the management of men which stamp them as among the world's geniuses. In our time much has been said of the ability of such a man as Cecil Rhodes and what he accomplished as an empire builder in South Africa. Considering the difference of circumstances, the lack of means of communication, the immense distances that had to be traversed and the dangers encountered, there are at least three men of Columbus' Century who have gained a place in history such as Cecil Rhodes will never have. The qualities exercised were of the same kind, but of much higher order, because requiring more independent activity and the most absolute self-reliance. What Vasco da Gama did in India for the Portuguese, Cortes in Mexico and Pizarro in Peru for the Spaniards represent achievements in empire building that have deservedly given these men an undying name in history. There were unfortunate abuses in the work. There always are whenever a savage race is brought under the dominance of what is at least supposed to be a more civilized people. There always are, even in the heart of our modern civilization, whenever one class of people can with impunity take advantage of another.

The work of these men is perhaps best illustrated by short sketches of the careers of Cortes and Pizarro. Cortes, sent as a boy to the University of Salamanca, found that he had no liking for study and that his restless spirit could not be satisfied with an education and the career of law which his parents destined him for. He joined an expedition that brought him to the Antilles at the age of nineteen, and soon showed the qualities of daring and military aptitude that made him a favorite with his superiors in the service. As a consequence, he was named as commander in the expedition to Mexico. He had solved the Indian method of warfare by decoy and ambush and turned it against the Indians themselves. He soon became noted for the almost lightning-like celerity, as it seemed to his opponents, of his movements. When the Governor of the Antilles, suspecting Cortes of personal ambitious designs, sent an expedition against him, he captured its commander by a surprise, though he himself had only one-quarter of the force that his opponent mustered. Against overwhelming odds he succeeded in conquering the Mexicans and establishing Spanish dominion throughout the country.

While his conquest was disfigured by many of the unfortunate evils that so often have characterized such events in history, Cortes was not unkind to the Indians and he endeavored in every way to improve their condition and lift them up to a higher plane of civilization. Even Las Casas mentions him favorably and, while his kind treatment of the Indians is sometimes said to have been part of a deep-laid plan to use his power over them for selfish reasons and even for treason against the Spanish Crown, this explanation seems far-fetched. Cortes knew how easily his position could be undermined at court and, above all, he knew the fate of many of the men who had accomplished great things for Spain and of the readily comprehensible suspicions that were likely to attach to a man who had made so great a success as his. He was of an independent character and used expressions which indicated that he would not submit to the treatment that had been dealt out to others. It is not surprising, then, that after a time he was excluded from the government of Mexico and had to look elsewhere for further occupation for his restless ambition. He was allowed to join the great expedition against Algiers in 1541, but after its disastrous end did not long survive the failure. Cortes could write well, and has written the accounts of his own achievements, and these have been published in a number of editions, with translations into many languages. They show that he was a clear-headed man of great ability in an intellectual and literary sense, as well as for administration, and, while colored quite naturally in his own favor, they are valuable sources for history.

Pizarro, *filius nullius,* with his fortune to make, everything to gain and nothing to lose, set sail at the age of twenty-eight with Alonzo de Ojeda from Spain. After many hardships he attached himself to Balboa, and accompanied him across the Isthmus of Panama in the expedition which discovered the

Pacific. After Balboa's death he followed the fortunes of Pedrarias, the governor of the region. Hearing of the achievements of Cortes in Mexico and the reports of the riches of the countries lying along the shore of the Pacific Ocean to the south, he organized an expedition to conquer them. Their project seemed so utterly rash and foolhardy, without any prospects of success, that the people of Panama called those who had joined the expedition "the company of lunatics." In spite of every discouragement, Pizarro continued his preparations, and after eighteen months returned to Panama with an abundance of gold and glowing accounts of the wealth of the countries he had visited. The Governor, jealous of his success, withdrew his support and refused to allow him to continue his explorations.

Pizarro then crossed the ocean to Charles V, laid his information and plans before him and Charles, recognizing his ability and the probable success of his project, conferred on him the Order of the Knighthood of St. James and made him Governor and Captain-General, with absolute authority, in all the territories he might discover and subjugate. His orders could be reviewed only by the Royal Council in Spain. Armed with this authority, Pizarro proceeded to add the empire of Peru to that of Charles V, then ruling over more of Europe than anyone since the time of the Roman Emperors. The romantic story of this achievement and of Pizarro's assassination have often attracted the attention of dramatists, writers of fiction, as well as historians. There is no doubt at all of the magnificent daring, the political talent, nor the administrative ability of the man who succeeded in doing this in spite of obstacles that looked absolutely unsurmountable. This was accomplished by the free use of treachery, breaking of faith, as well as taking advantage in every way of the natives, but empire builders at all times have had such elements in them. Pizarro is no worse than modern conquerors, and in many respects is far better. The stories of India, Egypt and Africa will look quite as bad before the bar of history as that of Peru.

Our own great task of exploration and of colonization and conquest during the past hundred years has been the opening up of Africa and the finding of the North and South Poles. The opening up of Africa represents a really great extension of civilization, and doubtless will hold an important place in history. It is more than doubtful, however, if our colonizers and conquerors will be dealt with any more generously in history, or placed on a higher plane of fellow-feeling for the natives, than the colonizers and conquerors of Columbus' Century. The slave trade had been abolished early in the nineteenth century, and yet there has been the feeling many times during the past hundred years that the natives of South Africa were being abused almost as in the days of slavery, and that even the natives of South America under European influence in certain places were little better than slaves. Indeed, the whole attitude of mind of the modern time with regard to the early conquerors has had very interesting light thrown on it by investigations, which showed that in many states of our own country there was a system of employing ignorant labor that could only be characterized as slavery.

After recalling the "spheres of influence" of the different nations and the mode in which South Africa has been parcelled out without any regard for the native inhabitants or their rights in the question, it becomes clear that the world, for all its complacent condemnation of the men of the older time, has not changed a particle since Columbus' Century. The two Latin nations, the Spaniards and the Portuguese, were the conquerors and colonizers in the early sixteenth century. The Teutonic nations, England and Germany, because they had replaced Spain and Portugal as the leading commercial countries, did the work in the later nineteenth. The differences between the modes of action and the general conduct of affairs at the two periods are very slight when compared to the close similarities of motive and purpose. Nations at both periods were looking for a region by which they could enrich themselves, and explorers and colonists and pioneers who went out were actuated by just the same motives at both times. Indeed, it is very doubtful whether we have point for point accomplished anything like so much good for the natives as the Spaniards tried to do, and as we have seen in the chapter on Columbus' Century in America, often with striking success.

After all, it must not be forgotten that there are more Indians alive in Mexico and in South America now than when Columbus landed. It has been impossible as yet to lift the natives up to the high plane of civilization of their European invaders, which has been reached only after many centuries of training, but undoubtedly much has been done. In many of these countries even the natives are nearly ready for self-government, and the countries with the handicap of their mixed races are, considering all the conditions, as prosperous as we are, and visitors often declare their upper classes possessed of a higher state of culture than ours. President Taft, after thorough practical experience in the Philippines, declared that the natives were on the high road to readiness for self-government and that they represent the only example of a people who, invaded by civilized conquerors and colonists, had been gradually lifted out of their barbarism on to a higher and higher plane. The beginning of this accomplishment came in Columbus' Century. It is only by comparing what our own and that century did in the solution of similar problems that we can get any idea of how admirable in many ways is the work of the earlier period. If at the end of the next century the natives of Africa shall fare as well as those of South America and the Philippines, the comparison will be more satisfactory.

Our problem of adventurous navigation in the nineteenth century has been the discovery of the North and South Poles. We have succeeded in our purpose, but not without much sacrifice of treasure and men and much suffering. For many people in our time the finding of the Poles has seemed merely a quixotic undertaking, and, as a matter of fact, there has been no great practical purpose in it. The voyages of the navigators of the early sixteenth century must have seemed just as quixotic, though after any successful voyage the fruits of the expedition, in a commercial as well as a scientific and cultural way, could be readily appreciated. When we estimate the difference between the small sailing vessels of that time and the utter lack of facilities for the storage and preservation of food as well as the dangers of the literally trackless ocean, some idea of the bravery of these hardy adventurers can be appreciated. Our steam vessels, with preserved foods and medicines usually available and the understanding of the dangers that they are to meet, has made our voyages comparatively simple, yet we have felt the inspiration of accomplishment. Columbus' Century is almost infinitely higher in the place that must be accorded to it for the spirit and the number of the men who ventured upon long voyages from which so many never returned and on which all trace was absolutely lost of many and many a vessel. In spite of the losses, there was never any dearth of men to take up the work of exploration and conquest, and their success revolutionized modern history.

CHAPTER VII

AMERICA IN COLUMBUS' CENTURY

Since our English colonization of America did not take place until the seventeenth century—Jamestown, 1607; Plymouth, 1620—it is ordinarily presumed, in English-speaking countries at least, that there is little or nothing worth while talking about in American history during Columbus' Century, ending as it does in 1550. As a matter of fact, however, though America was discovered only in 1492, there is an extremely interesting and significant chapter of American history between 1500 and 1550. This is, of course, all in the Spanish-American countries. It has unfortunately been the custom to think of the Spanish colonies as backward in all that relates to education and culture, but the history of even this half century here in America, when some magnificent progress was made, the landmarks of which still remain, is quite enough to show how far from the realities of things as they were some of our fondly cherished historic impressions are. There is not a single phase of civilization that did not receive diligent attention very early in the history of Spanish America, and the results achieved were such as to represent enduring progress in the intellectual life. In education, in printing and the distribution of books, in art and architecture, in the training of the Indians in the arts and crafts as well as in the principles of self-government, and even in science, though this department of human accomplishment is usually not supposed to be seriously taken at this time, there are many significant early American achievements.

It is only in comparatively recent years that in English-speaking countries there has come anything like a proper recognition of the work done by the Spaniards in America in the early days of the history of this continent. It has been the custom to think that, while the English colonists came to make a home here, the main purpose of the Spaniards in America was to exploit the inhabitants and the country and to do just as little as possible for either, provided only the members of the Spanish expeditions made money enough to enable them to live in comfort at home in Spain after a few years of stay here in America. Mr. Sidney Lee, the distinguished editor of the English Biographical Dictionary and an authority on Shakespeare and the Elizabethan period, as well as the sixteenth century generally, in a series of articles which appeared in *Scribner's* for 1907 on "The Call of the West," contradicted most of these notions that are so prevalent with regard to the contrasted attitude of the English colonists and the Spanish colonizers during the early history of the continent. He said, for instance, not hesitating properly to characterize the principal reason for this historical deception:

STRADAN (JAN VAN DER STRAET), NIELLO, IVORY COLUMBUS ON HIS FIRST VOYAGE

"Especially has theological bias justified neglect or facilitated misconception of Spain's rôle in the sixteenth century drama of American history. Spain's initial adventures in the

New World are often consciously or unconsciously overlooked or underrated in order that she may figure on the stage of history as the benighted champion of a false and obsolete faith, which was vanquished under divine protecting providence by English defenders of the true religion. Many are the hostile critics who have painted sixteenth century Spain as the avaricious accumulator of American gold and silver, to which she had no right, as the monopolist of American trade, of which she robbed others, as the oppressor and exterminator of the weak and innocent aborigines of the new continent who deplored her presence among them. Cruelty in all its hideous forms is, indeed, commonly set forth as Spain's only instrument of rule in her sixteenth century empire. On the other hand, the English adventurer has been credited by the same pens with a touching humanity, with the purest religious aspirations, with a romantic courage which was always at the disposal of the oppressed native.

" No such picture is recognized when we apply the touchstone of the oral traditions, printed books, maps and manuscripts concerning America which circulated in Shakespeare's England. There a predilection for romantic adventure is found to sway the Spaniards in even greater degree than it swayed the Elizabethan. Religious zeal is seen to inspirit the Spaniards more constantly and conspicuously than it stimulated his English contemporary. The motives of each nation are barely distinguishable one from another. Neither deserves to be credited with any monopoly of virtue or vice. Above all, the study of contemporary authorities brings into a dazzling light which illumes every corner of the picture *the commanding facts of the Spaniard's priority as explorer, as scientific navigator, as conqueror, as settler.*" (Italics ours.)

In education particularly the Spaniards accomplished much for which they have been given almost no credit in English-speaking countries until the last few years. As a matter of fact, as the President of a great Eastern university said at a public dinner not long since, "We have only just discovered Spanish America." The lamented Professor Bourne of Yale, who wrote the third volume of "The American Nation,"* on Spain in America, was one of the earliest American students of history to realize how much of injustice had been done by the ordinarily accepted notions of Spanish-American history that are common in English-speaking countries. In his chapter on "The Transmission of European Culture," which is a vindication of Spanish-American intellectual achievements, Professor Bourne proceeds to institute comparisons between what was done in Spanish and in English America in the early centuries for education and intellectual development, and constantly to the disadvantage of the English-speaking countries. He said:

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* Harpers, New York.

"Not all the institutions of learning founded in Mexico in the *sixteenth century* can be enumerated here, but it is not too much to say that in number, range of studies and standards of attainments by the officers they surpassed anything existing in English America *until the nineteenth century*. (Italics ours.) Mexican scholars made distinguished achievements in some branches of *science, particularly medicine* and surgery, but pre-eminently linguistics, history and anthropology. Dictionaries and grammars of the native languages and histories of the Mexican institutions are an imposing proof of their scholarly devotion and intellectual activity. Conspicuous are Toribio de Motolinia's '*Historia de las Indias de Nueva España*,' Duran's '*Historia de las Indias de Nueva España*,' but most important of all Sahagun's great work on Mexican life and religion." Most of these works were written after the close of Columbus' Century, but the ground had been prepared for them and some of the actual accumulation of facts for them begun in our period. They followed as a natural development out of the scholarly interests already displayed in the first half of the sixteenth century.

Perhaps the most interesting feature of Spanish-American development of education is the fact that its first landmark is a school for the education of Indians. Not a few of the Spaniards who came to Mexico in the first half of the sixteenth century had enjoyed the advantage of a university education. As their children grew up they felt like sending them back to Spain for university education, and many were so sent. The need for the education of the Indians was recognized early, however, and in 1535 the College of Santa Cruz in Tlaltelolco, the quarter of the City of Mexico reserved for the Indians, was founded under the patronage of Bishop Zumarata. Among the faculty were, as might be expected, graduates not only of Salamanca, the great Spanish university of the time, but also of the University of Paris, which was at this period the leading university of the world. It is interesting to realize that these professors did not consider that they were fulfilling their whole duty by teaching alone, but also devoted themselves faithfully to what many have come to look upon apparently as a modern development of university life, the duty of investigating and writing. This is the real index of the vitality of a university and the sincerity of its professors. Among the teachers of Santa Cruz were such eminent scholars as Bernardino de Sahagun, the founder of American anthropology, and Juan de Torquemada, himself a graduate of a Mexican college, whose "*Monarquia Indiana*" is a great storehouse of facts concerning Mexico before the coming of the whites, containing many precious details with regard to Mexican antiquity.

Just as Columbus' Century was closing, arrangements were made for the organization of two universities in Spanish America—the one in Mexico City and the other in Lima, Peru. They received their royal charters the same year, 1551, but besides the granting of their charters a definite amount of the Spanish revenues was set aside by the Crown as a government contribution to their support. It seems worth while to note that such encouragement on the part of the English Government for an institution of learning in the American colonies a full century, or even two, later than this would have been quite out of the question. Whatever the English colonists did for education they had to do for themselves. There was no aid and not even sympathy with their efforts. English universities for several centuries refused to recognize American universities as on a par with them, and rightly, for their standards were too low, though it is an extremely interesting commentary on the educational situation in America, and especially on the usually accepted notions as to the relative significance of Spanish and English education here, that both the University of Lima and of Mexico came to be recognized during the sixteenth century as sister institutions of learning not only by Salamanca and the other Spanish universities, at this time among the best institutions of learning in Europe, but also by the other university of Europe, whose prestige was the highest, that of Paris. There was a certain interchange of professors among them, though this was not formally organized, and graduates of Salamanca and Paris taught at both Mexico and Lima. Students from these American universities were accorded their American ratings and allowed to proceed with their work on an equality with European university men, a privilege scarcely accorded to English-American university students even yet.

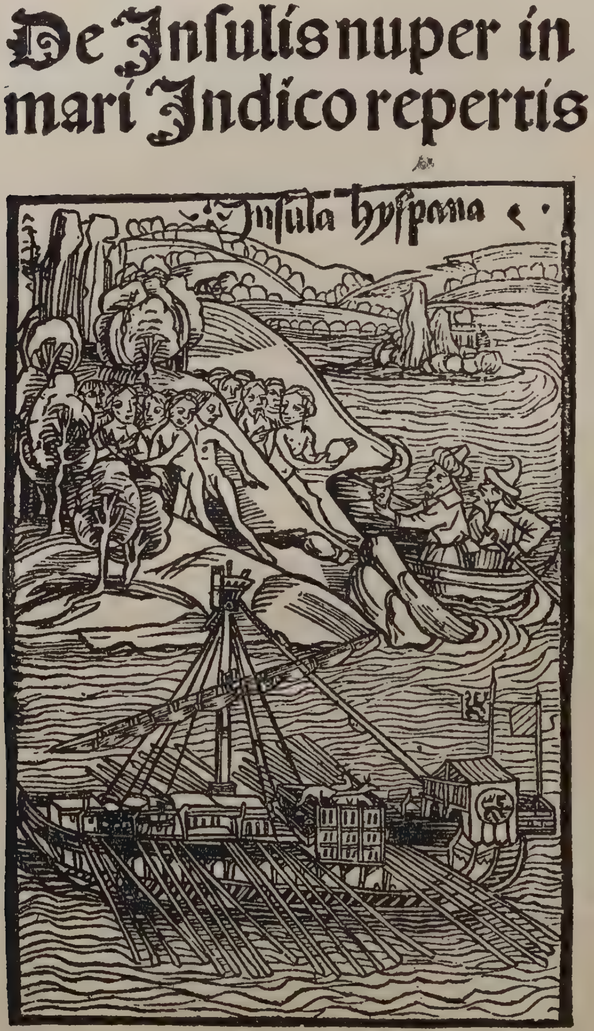
The scholars of the Old World were quite well aware that the New Learning was penetrating into the Western Hemisphere and were proud to think that the humanities were being cultivated beyond the Western ocean. Before the end of Columbus' Century, Marcantonio Flaminio, whom Sandys in his "Harvard Lectures on the Revival of Learning" calls the purest of the Latin poets of the age, a man who was a great friend of Vittoria Colonna, in sending to Cardinal Alessandro Farnese a volume of Latin poems by the scholars of Northern Italy, assures the Cardinal that France and Spain and Germany and distant Brittany would do honor to those Latin muses, and that even the New World would share in admiration for them. As he puts it: "Those on whom the light of dawn arises when the skies of Italy are wrapped in darkness will devote their nights and days to the study of the Latin poets of Italy."

> "For strange to tell, e'en on that far-off shore
> Doth flourish now the love of Latin lore."

The newly created Universities of Mexico and Lima developed during the half century following Columbus' Century into full-fledged institutions of learning amply deserving the name university. Lectures in medicine were delivered in

Mexico in 1578, and a full medical faculty was organized before the close of the century. Our first school of medicine in English America did not come into existence for fully two centuries later. More than half a century before this, however, special care had been exercised by the Spanish authorities to prevent the exploitation of the Spanish colonists or the Indians by pretenders to knowledge in medicine. As early as 1527 strict medical regulations were drawn up by the municipal council of the City of Mexico, granting the license to practise medicine only to those who showed the possession of a university degree in medicine. Even earlier than this arrangements had been made for the regular training of barber surgeons, so that injuries and wounds of various kinds might be treated promptly as well as properly, so that even the poorer classes might have the benefit of some regular training in those whose ministrations they could afford to pay for. A pure-drug ordinance, regulating the practice of the apothecaries, was issued as early as 1529. It was practically only in our own time that similar regulations were adopted in this country.

Standards in university teaching were well maintained. Post-graduate work was literally post-graduate work, and students might take up the study of medicine or of law or of divinity only after having made proper preliminary studies in the undergraduate departments of the university. The Spanish-American universities received a charter not only from the Spanish crown, but also from the Pope. The formal title of the University of Mexico was the Pontifical University of the city. The Papal charter was sought because it was the only way to secure an international value for academic degrees, for the Papacy was the international authority of the time. Papal charters for the universities, however, were granted only on condition that standards should be maintained. There are any number of these Papal university charters extant which emphasize this necessity. On the establishment of a new university the professors had to be graduates of well-recognized, authoritative universities, in which the examinations were held in oath-bound secrecy, in order to assure as far as possible absolute fairness and the maintenance of standards. The course of studies and the length

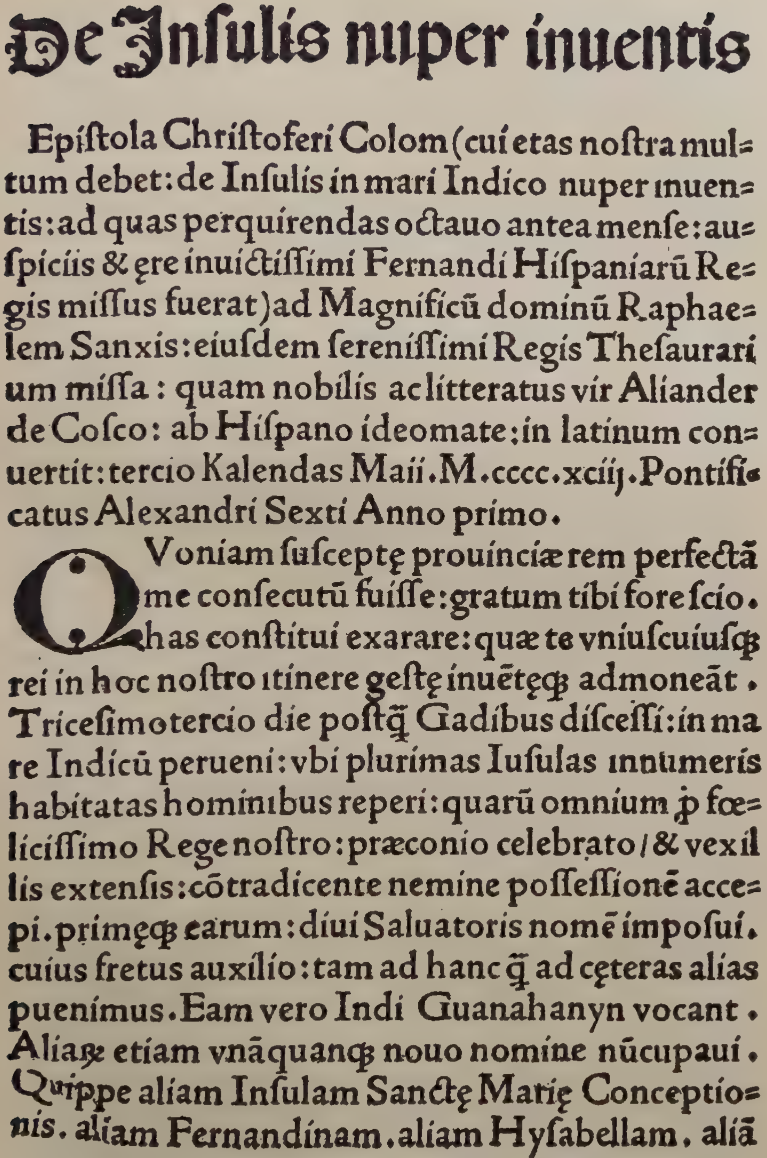


De Inſulis nuper in mari Indico repertis

Inſula hyſpana

TITLE PAGE OF LETTER OF COLUMBUS (BASEL, 1494)

of time for them had to be arranged in accordance with the standards of older universities.



De Inſulis nuper inuentis

Epiſtola Chriſtoferi Colom (cui etas noſtra multum debet: de Inſulis in mari Indico nuper inuentis: ad quas perquirendas octauo antea menſe: auſpiciis & ęre inuictiſſimi Fernandi Hiſpaniarū Regis miſſus fuerat) ad Magnificū dominū Raphaelem Sanxis: eiuſdem ſereniſſimi Regis Theſaurarium miſſa: quam nobilis ac litteratus vir Aliander de Coſco: ab Hiſpano ideomate: in latinum conuertit: tercio Kalendas Maii. M.cccc.xciij. Pontificatus Alexandri Sexti Anno primo.

Quoniam ſuſceptę prouinciæ rem perfectā me conſecutū fuiſſe: gratum tibi fore ſcio. has conſtitui exarare: quæ te vniuſcuiuſq; rei in hoc noſtro itinere geſtę inuētęq; admoneāt. Triceſimotercio die poſtq̄ Gadibus diſceſſi: in mare Indicū perueni: vbi plurimas Iuſulas innumeris habitatas hominibus reperi: quarū omnium ꝓ fœliciſſimo Rege noſtro: præconio celebrato / & vexillis extenſis: cōtradicente nemine poſſeſſionē accepi. primęq; earum: diui Saluatoris nomē impoſui. cuius fretus auxilio: tam ad hanc q̄ ad cęteras alias puenimus. Eam vero Indi Guanahanyn vocant. Aliaꝝ etiam vnāquanq; nouo nomine nūcupaui. Quippe aliam Inſulam Sanctę Marię Conceptionis. aliam Fernandinam. aliam Hyſabellam. aliā

PAGE FROM THE LETTER OF COLUMBUS (BASEL, 1494)

The Spanish-American universities had the advantage of being closely in touch with the European universities, and as a consequence had taken their traditions direct from them. Papal university charters, as a rule, required explicitly that there should be three years of university work before medicine or other graduate work might be taken up, and then four years of medicine before the degree of doctor would be granted. Even after this, according to the Italian laws of the thirteenth and fourteenth centuries, the practice of medicine must not be begun by the graduate until he had spent a year in practice with an experienced physician. This is the year of hospital work that we are now trying to introduce into the medical schools as a requirement and which is taken, but voluntarily, by most of those who are seriously interested in their professional studies. The preliminary requirements, that is, such formal academic preparation for the study of medicine as makes it possible for a young man to take up the subject and properly benefit by it, have only become obligatory by law in very recent years here in America, and that to a very limited degree.

The letter written to the Municipal Council of his native city, Seville, by Dr. Chanca, who accompanied Columbus on his second expedition, shows the thoroughly scientific interest and the acute powers of observation of the Spanish physicians of this time. This is unquestionably the first written document about the flora, the fauna, the ethnology and the anthropology of America. Dr. Fernandez de Ybarra published in the *Journal* of the American Medical Association, September 29, 1906, some abstracts from this letter which show that these expressions are justified by its contents and are not mere enthusiastic terms for rather commonplace observations. Chanca described in detail woods of various kinds, fruit, spices, plants such as cotton, the birds and animals, and above all the customs, appearance and mode of living of the inhabitants. He gives in detail their slave-making and cannibalistic tendencies. There was nothing that escaped Chanca's observation. He found turpentine, tar, nutmegs, ginger, aloes, though he noted that the aloes were not the same kind as those in Spain (Barbadoes aloes are still considered inferior), cinnamon, cloves, mastic and many other things. He notes the food of the inhabitants, their mode of working, the absence of iron, yet the well-made implements, the presence of gold in many places, describes the climate of the country and gives important details with regard to its meteorology.

Dr. Chanca had been the physician to their majesties, and he gave up not only this position, but a large and lucrative practice in order to become the physician of the colonies. It is principally through him that we have any account of Columbus' second voyage. This second voyage was, of course, very different from the first and carried a thousand five hundred persons, among them many of the nobility who had recently been in the wars with the Moors and who were looking for new conquests in America. They were restless and hard to manage, negligent and rash, they tasted many things without due care and succeeded in poisoning themselves on a number of occasions, they caught the fevers of the country and only for the presence of Dr. Chanca it is very probable that most of them would have perished. Columbus, who thought that he owed him his life, praises him highly in a letter to the Sovereigns, asking permission to pay him special fees in addition to the salary and rations which he was allowed as *scrivener* in the Indies. His letter and the estimation in which he was held at the time is the best possible evidence of the standard of attainments of the Spanish physicians of Columbus' Century.

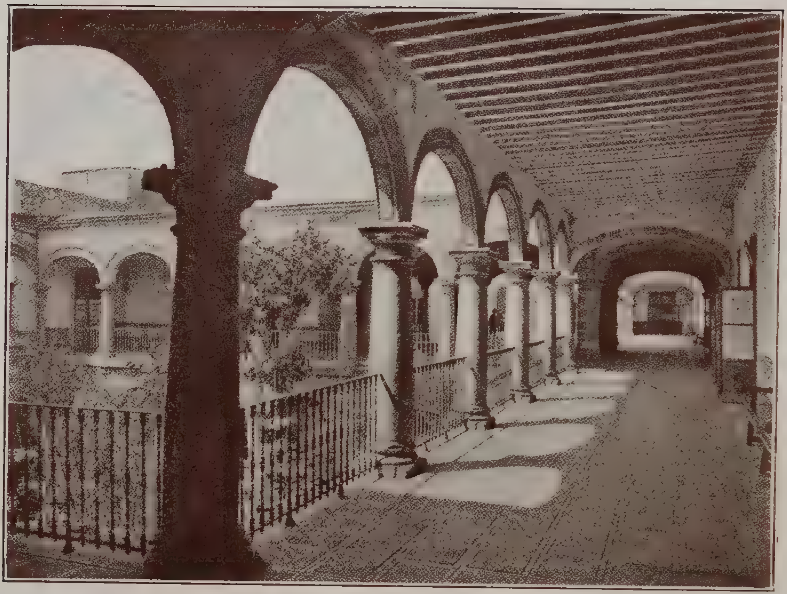
One of the memorable products of American scholarship during Columbus' Century, that must not be passed over without mention here, is Garcilaso de la Vega, the historian of Peru, born in our period, though he did his work afterwards. He was the son of a daughter of the Incas, the reigning family in Peru when the Spaniards came, and owed to his mother the suggestion of writing a history of his ancestors and their land. He travelled over the country consulting the old inhabitants, the principal among whom were relatives through his mother and his father was the Spanish Governor of Cuzco, one of the few Spanish governors, be it said, who did not die a violent death. Garcilaso was then in an excellent position to gather all the details of the story, yet without prejudice against the Spaniards. As he spent his life after the age of twenty mainly in Europe, his opportunities for thorough understanding of all the conditions were complete. His work is of a great historic value, and indeed is the foundation of all that we know of old Peru. It has been translated into all the modern languages.

Besides this attention to the higher education and to the education of the Indians, popular education was cared for sedulously and, above all, the Indians were instructed in the use of their hands, in the arts and crafts, and in every way that would make them useful, happy citizens. The contrast between English America and Spanish America in this matter is rather striking and has been emphasized by Professor Bourne in the chapter of his book to which we have already referred. He said:

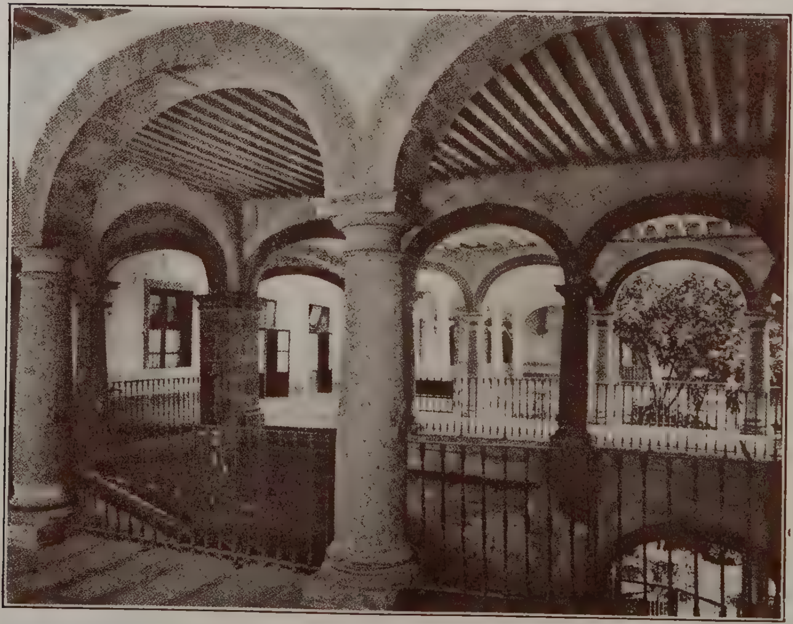
"Both the crown and the Church were solicitous for education in the colonies, and provisions were made for its promotion on a far greater scale than was possible or even attempted in the English colonies. The early Franciscan missionaries built a school beside each Church and in their teaching abundant use was made of signs, drawings and paintings. The native languages were reduced to writing, and in a few years Indians were learning to read and write. Pedro de Gante, a Flemish lay brother and a relative of Charles V, founded and conducted in the Indian quarter in Mexico a great school, attended by over a thousand Indian boys, which combined instruction in elementary and higher branches, the mechanical and fine arts. *In its workshops the boys were taught to be tailors, carpenters, blacksmiths, shoemakers and painters."* (Italics ours.)

Almost needless to say it is only in quite recent years that we have awakened to the necessity for such teaching for our Indians and, may it be added, for the poorer classes of our population generally.

The printing press early found its home in America, and even during Columbus' Century quite a number of books were published in the Spanish-American countries. It is often said that the first book printed in America was the



HOSPITAL, MEXICO (FOUNDED BEFORE 1524)



HOSPITAL, MEXICO (ANOTHER VIEW)

Massachusetts Bay Psalm Book, issued, I believe, in 1638, but of course this was long anticipated in Mexico and in South America. In this, as in many other of the details of Spanish-American culture, Professor Bourne has given authoritative information. He said:

"The early promoters of education and missions did not rely upon the distant European presses for the publication of their manuals. The printing press was introduced into the New World probably as early as 1536, and it seems likely that the first book, an elementary Christian doctrine called 'La Escala Espiritual' (the ladder of the spirit), was issued in 1537. No copy of it, however, is known to exist. Seven different printers plied their craft in New Spain in the sixteenth century. Among the notable issues of these presses, besides the religious works and church service works, were dictionaries and grammars of the Mexican languages, Pufa's 'Cedulario' in 1563, a compilation of royal ordinances, Farfan's 'Tractado de Medicina.'"

An enduring and very striking monument of the humanitarian progress made in Spanish America at this time in medicine is a hospital that still stands in the City of Mexico. It was built originally by Cortes and endowed by him, and his descendants still appoint the superintendent and have much to do with the support of the hospital. It was erected in 1524, and it might well be thought that at any such early date as this it would be a very rude structure and the surprise would be that it is still standing. Miss Nutting and Miss Dock, however, in their "History of Nursing," have given two pictures of it, both of which we reproduce here, and which show that it was a beautiful hospital building and quite worthy of the great beginnings that were made in other ways in Mexican educational and humanitarian progress. The pretty courtyard and porticoes were eminently suitable for the changeable climate of Mexico, and the whole building is a monument of Spanish culture as well as Spanish charity.*

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* The surprise inevitable for many at finding that such a handsome hospital was erected at this time will be tempered by recalling that this is the period when some of the most beautiful hospitals in the world were erected. (See the chapter on Social Work and Workers.)

Champlain, the French navigator, having visited the City of Mexico before the end of the sixteenth century, said of it: " But all the contentment I felt at the sight of things so agreeable (the beautiful natural scenery) was but little in comparison with that which I experienced when I beheld the beautiful City of Mexico, which I did not suppose had such superb buildings with splendid ample palaces and fine houses and the streets well laid and where are seen the large and handsome shops of the merchants full of all sorts of every kind of merchandise."

Nor must it be thought that Mexico was the only progressive part of Spanish America so early in our history. Indeed, so much had been accomplished in the Panama region by the end of Columbus' Century that, when Sir Francis Drake raided the place some twenty years later, the bank of the Chagres River was lined with warehouses, there was a handsome monastery and beautiful church, and there were many houses of stone decorated with carvings of many kinds, the residences of the Governor and the royal officials. When the flow of the Chagres was arrested in order to make the Gatun dam for the Panama Canal, all vestiges of this disappeared, though the church was practically the only building of any importance then standing. It showed by the charm of its architecture and its interesting carvings how high had been the culture and how good the taste of the builders almost a century before there was any permanent settlement in English America. The rise of the waters of the dam did not cover as important records of human progress as when the great irrigation dam at Assuan submerged the ruins of the ancient Temple of Philae in Egypt, nor cover up such interesting works of art, but it did obliterate some of the evidence for a stage of civilization in America that in English-speaking countries at least has been wantonly minimized or sadly misunderstood.

There are many remains in Panama that give some idea

Besides they began very early to erect beautiful buildings in Mexico City. The University Buildings, the Cathedral and other public buildings were worthy of the fine traditions of architecture prevalent in Europe and especially in Spain at this time.

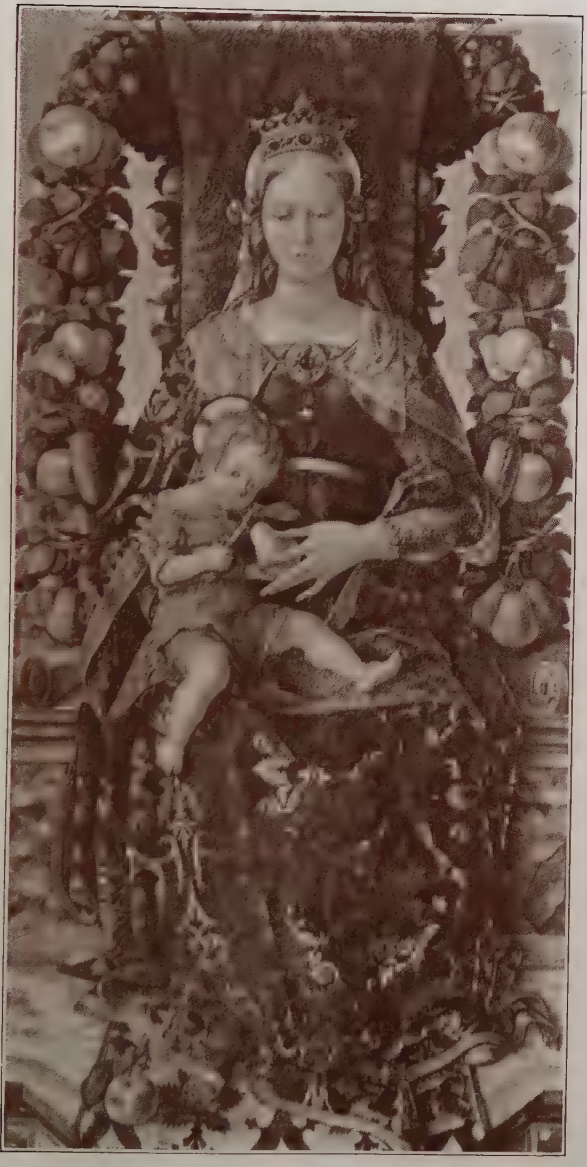
of how much the Spaniards did during Columbus' Century and how permanent were many of their constructions. There is an old bridge from the early part of the sixteenth century which, though built without a keystone, has its main arch still standing. There is the famous flat arch which demonstrates so clearly that this region must have been very little disturbed by earthquakes ever since, because it seems almost incredible that a structure should stand with so slight curvature for any length of time, even in an absolutely undisturbed country, yet this has been in place for nearly four centuries in Panama. There was a magnificent paved road across the isthmus, the King's Highway, remains of which are still to be found in excellent preservation. Some portions of it were used during the course of the construction of the Panama Canal and proved very serviceable. When we realize what would have happened to one of our roads in a century, much less four hundred years, a good idea of their permanency of construction is reached. The old tower of St. Jerome, still standing, shows how solidly and yet how ornately the Spaniards built, and there was evidently a magnificent set of monumental constructions for religious and civil purposes on the isthmus almost a century before the pilgrims landed on Plymouth Rock. The story of these early days in American history has not yet been told in its entirety, but even the details that are available show us how well the Spaniards labored for permanency of their foundations in America.

CHAPTER VIII

SOME GREAT WOMEN

Probably what must be considered the most interesting chapter in the history of Columbus' Century for our generation is that which tells the story of the women of the time who accomplished purposes that make their names forever memorable. Great as were the men, the women were in every way worthy of them, and these women of the Renaissance have attracted attention ever since, though never more so than now, when we are beginning to take seriously once more the problem of giving to women the amplest opportunities for intellectual development and achievement that they may desire. The Italian ladies of the Renaissance have been the subject of particular attention, sometimes indeed to the almost total eclipse of their equally as interesting sisters of the other nationalities, for in every country in Europe the Renaissance brought a magnificent development of feminine intellectual incentive and accomplishment and brought out a fine demonstration of women's powers.

It would be quite impossible to give any adequate idea of the large numbers of women who at this period manifested intellectual ability of a high order. All that can be done is to select from the various countries of Europe those women who at this time did work of such high order that their names will never willingly be let die and whose careers will have an enduring interest for mankind so long as our present form of civilization continues. They not only merit a place beside the men of the time, but some of them indeed must be classed as surpassing all but the very highest geniuses of the period. The variety of their achievement is quite as interesting as its quality. Above all, the women of Columbus' Century demonstrated their ability to administer government, to organize particularly charitable purposes, to secure the building of fine



CRIVELLI, MADONNA ENTHRONED

hospitals and proper care for the ailing poor, and to direct the decoration of their homes and the beauty of home surroundings, so that Renaissance interior decoration and gardens have been the special subject of imitation whenever in the after-time the beautifying of the home has come to occupy the position that it should.

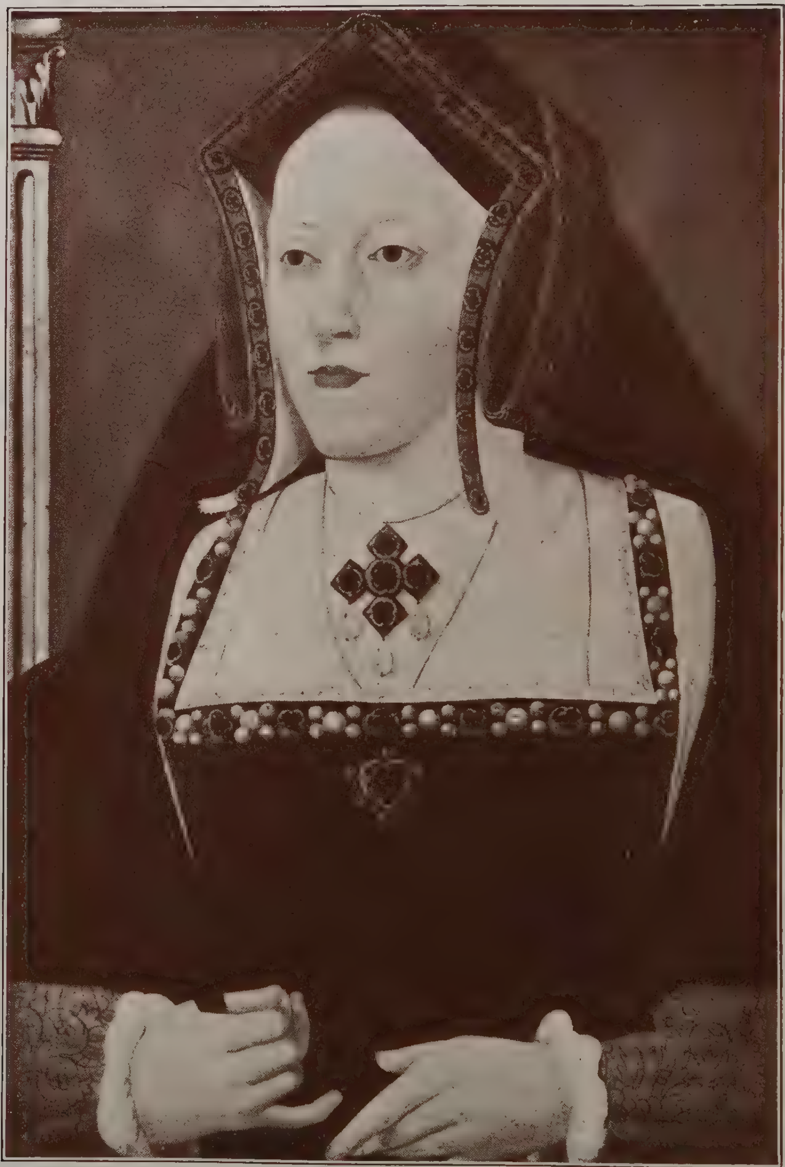
The first woman to be considered in Columbus' Century should naturally be Isabella of Castile, to whom so much of the possibility of Columbus' achievement is due. Fortunately in recent years her life and career have come to be much better known and we have reached a more fitting appreciation of her wonderful administrative ability and profound influence on her time. There is probably no woman in history who so deeply influenced her own nation and generation as Isabella. In a time of very great women she was the greatest. Withal, she was charmingly feminine and did much to lift the position of her sex in Spain up to the height of Renaissance achievements.

There is scarcely any mode of activity on which Isabella has not left traces of her genius. Her power of inspiring men was very great. She led her armies in person, and undoubtedly to her more than anyone else is due the success of the Spaniards against the Moors at this time. Her genius for peace as well as for war is evidenced by the formation of a constabulary force in Spain, the *Santa Hermandad,* intended for the protection of persons and property against injustice of any kind, though particularly against the violence of the nobles. She found Spain anarchic, without any power over disorders and with so many elements of disaffection that it seemed hopeless to think of making it a unified powerful country. She left it peaceful and prosperous, and when she died she was the ruler of a greater domain than the Roman Empire ever possessed. Some of this was undoubtedly her good fortune, but the happy accidents of history occur, as a rule, only to those who are able to take advantage of them. She encouraged education and, above all, obtained a fine education for herself. Her Castilian has been ranked as the standard of the language by the Spanish Royal Academy. When a mother, she took up the study of Latin so as to share her children's education, and learned to know it well. She was extremely solicitous for the education of her children and, in order to secure the best possible mental training for them, she established a palace school, where some of the most scholarly men of the time were invited to teach.

As a rule, all that most of us know about Isabella is that she recalled Columbus to her presence with the words: "I will assume the undertaking for my own crown of Castile and am ready to pawn my jewels to defray the expenses of it if the funds in the treasury should be found inadequate." It was a woman's intuition surpassing in its insight all the knowledge of those around her. There is perhaps one other fact that a great many people know, and that is, that during the siege of Granada she declared that she would not change her shift until the town had been taken. Told of her in praise at the beginning, the story has come in more refined times to seem a little ridiculous. But for anyone who knows the strenuous life, most of which was passed in the saddle, encouraging, cajoling, threatening, urging, leading, inspiring the men of her time until what was the most disturbed and unhappy country in Europe became a firmly consolidated nation, where prosperity and happiness went hand in hand, the spirit of the woman will be better revealed in that expression than in anything else.

There is perhaps no greater woman ruler in all the history of the world. What she was capable of physically in her long rides on horseback would seem almost incredible, and yet with all that she was eminently womanly, a fond mother to her children, noted for her care of her household and, strangest of all perhaps, a great needlewoman. Many a church in Spain was proud to display an altar cloth that was worked by her hands, and the historical traditions that traced them to her actual hand labor are well authenticated.

Her daughters as well as her sons received the benefit of the best education, though, with their mother's example and encouragement, they devoted themselves to needlework and even to the arts of spinning and weaving. It is said that Ferdinand the Catholic, her husband, could declare, as Charlemagne had done, that he used no article of clothing that



HOLBEIN, QUEEN CATHERINE OF ARAGON

had not been made for him by his wife or his daughters. When she was married to Ferdinand they were so poor that they had to borrow the money to make the presents to the servants that were customary on such occasions. It is said that she mended one doublet for her husband, the King, as often as seven times. Her deep piety, her firm character, her habits of industry and thrift, and yet her ability to recognize what was likely to be good for her kingdom and her people and to spend money freely on it, made an admirable example for the time. Above all, she discouraged the idle extravagance of the nobility and succeeded in greatly lessening the immorality at court. She made a magnificent collection of books, fostered learning at the universities, encouraged it among the women of the time, and it is no wonder that historians have spoken so much in praise of her. With all this she was extremely unhappy in her children—she saw her son die in the promise of youth, her daughter went mad, other daughters, including Queen Catherine of England, were destined, in spite of felicitous auguries in early life, to the most poignant unhappiness—and mother had to be the source of consolation for them all.

The spirit of Isabella in the matter of the rights of her subjects will perhaps be best appreciated from the famous expression which she used on hearing that Columbus had offered some of the Indians whom he brought home with him to some of the Spanish nobility as gifts. The Queen indignantly demanded when she heard of it, "Who gave permission to Columbus to parcel out my vassals to anyone?" Having learned that some of the Indians were being held as slaves in Spain she issued a decree that they should be returned to their native country at the expense of the person in whose possession they were found.

Prescott has drawn a striking contrast between the character of Isabella and of Elizabeth. The two names are in origin the same and there are many details of their careers that tempt to the making of a comparison. Because Elizabeth is really a product of Columbus' Century, seventeen years of age before the century closed, Prescott's comparison is a document of special value for us here, for it tells the story of two great women of the time, though the work of one of them was accomplished after the close of our period. He says (p. 188, Vol. III):

"Both succeeded in establishing themselves on the throne after the most precarious vicissitudes. Each conducted her kingdom, through a long and triumphant reign, to a height of glory to which it had never before reached. Both lived to see the vanity of all earthly grandeur, and to fall the victims of an inconsolable melancholy; and both left behind an illustrious name, unrivalled in the subsequent annals of their country.

"But with these few circumstances of their history, the resemblance ceases. Their characters afford scarcely a point of contact. Elizabeth, inheriting a large share of the bold and bluff King Harry's temperament, was haughty, arrogant, coarse and irascible; while with these fiercer qualities she mingled deep dissimulation and strange irresolution. Isabella, on the other hand, tempered the dignity of royal station with the most bland and courteous manners. Once resolved, she was constant in her purposes, and her conduct in public and private life was characterized by candour and integrity. Both may be said to have shown that magnanimity which is implied by the accomplishment of great objects in the face of great obstacles. But Elizabeth was desperately selfish; she was incapable of forgiving, not merely a real injury, but the slightest affront to her vanity; and she was merciless in exacting retribution. Isabella, on the other hand, lived only for others,—was ready at all times to sacrifice self to considerations of public duty; and, far from personal resentments, showed the greatest condescension and kindness to those who had most sensibly injured her; while her benevolent heart sought every means to mitigate the authorized severities of the law, even towards the guilty. . . .

"To estimate this (contrast) aright, we must contemplate the results of their respective reigns. Elizabeth found all the materials of prosperity at hand, and availed herself of them most ably to build up a solid fabric of national grandeur. Isabella created these materials. She saw the faculties of her people locked up in a death-like lethargy, and she breathed into them the breath of life for those great and heroic enterprises which terminated in such glorious consequences to the monarchy. It is when viewed from the depressed position of her early days, that the achievements of her reign seem scarcely less than miraculous."

Prescott has declared that her heart was filled with benevolence to all mankind. In the most fiery heat of war she was engaged in devising means for mitigating its horror. She is said to have been the first to introduce the benevolent institution of camp hospitals and her lively solicitude to spare the effusion of blood even of her enemies is often told. Her establishment of the Inquisition and the exile of the Jews are often set over against this, but Prescott did not hesitate to say, "It will be difficult to condemn her indeed without condemning her age; for these acts are not only excused, but extolled by her contemporaries as constituting her constant claims to renown and to the gratitude of her country." Spaniards of much more modern time have not scrupled to pronounce the Inquisition "the great evidence of her prudence and piety; whose uncommon utility not only Spain but all Christendom freely acknowledged." Undoubtedly it saved Spain from some of the troubles which devastated Germany during the Hundred Years' War after the Reformation, when religious divisions so embittered the struggle and made it impossible for national affairs to prosper or for men to be brought to any common understanding with regard to anything for the good of the commonwealth. The difference between the position of Spain and of Germany in this regard is highly instructive.

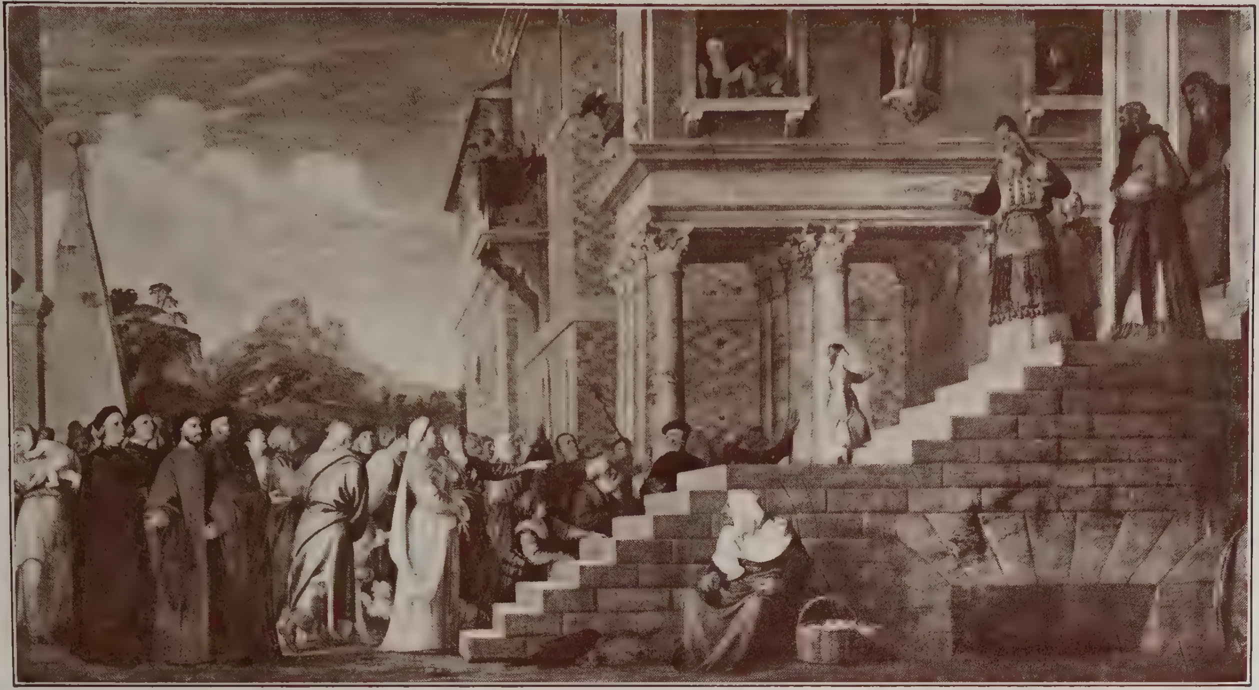
There are so many distinguished women of this period in Italy that a choice indeed is embarrassing. Probably, however, the general consensus of opinion would be that the typical great intellectual woman of this time is Vittoria Colonna, the daughter of the great Roman family of that name, who became the wife of the Marquis of Pescara. The Colonnas were at this time in exile at Naples, where her father was the Grand Constable. Her mother was Agnesina de Montefeltro of the Ducal house of Urbino and she was brought up after the age of ten by her prospective sister-in-law, the Duchess

Costanza, in the Island of Ischia. She was intimately related, then, to many of the important noble families of Italy and her career may be taken as a type of the possibilities of education and intellectual influence in her class at this time. Her husband became distinguished as a military leader and finally at scarcely more than thirty years of age was made the General of the Imperial forces when the Pope and the Emperor Charles V made an alliance and drove the French from Milan in 1528. He had been the commander of the Imperial Army at the battle of Pavia in 1525, after which Francis I, badly beaten and taken prisoner, sent his mother the famous despatch from his captive cell in the Certosa near Pavia, "All is lost save honor."

Francis was too important a prisoner to be left to the fortunes of war in Italy, so Charles V had him transferred by ship to Madrid. Emissaries of the French, who tried to win the Marquis of Pescara from his allegiance to the Emperor, represented this action to him as something of an insult or at least a lack of trust. They offered him the throne of Naples if he should abandon the Emperor and come over to the French. The Marquis had been wounded and was just recovering when these offers were made. He wrote to his wife, Vittoria, with whom he was on terms of the most charming affection, telling her of the offer and asking her advice. With a crown dangling before her and the added temptation, the subtlest there could be for a woman, of going back as Queen where she had been only a lady-in-waiting at Court, Vittoria wrote the famous letter which has deservedly so often been quoted:

"Consider well what you are doing, mindful of the fame and estimation which you have always enjoyed; and in truth, for my part, I care not to be the wife of a king, but rather to be joined to a faithful and loyal man; for it is not riches, titles, and kingdoms which can give true glory, infinite praise, and perpetual renown to noble spirits desirous of eternal fame; but faith, sincerity, and other virtues of the soul; and with these man may rise higher than the highest kings, not only in war, but in peace."

Not long afterwards her husband died as a consequence of



TITIAN, PRESENTATION OF VIRGIN

his wounds and Vittoria was broken-hearted. The letters which they had written to each other show how much of a love match this was and all the sixteen years of married life there seems to have been nothing to disturb it. Vittoria's only consolation now was in religion, and she thought of entering a convent, but it was felt that she could accomplish much more good in the world and a special Papal brief was issued permitting her to spend as much time as she wished in convents, but forbidding superiors to allow her to take the veil until the poignancy of her grief subsided and she might be able to make up her mind without being too much overborne by her sense of loss. Most of the rest of her life was spent in convents or in almost conventual seclusion. She wrote a series of poems, many of which are religious. A long series constitutes a sort of *In Memoriam* for her dead husband. They are written in very charming Italian verse and a well-known critic and writer on Italian literature has described these poems "as penetrated with genuine feeling. They have that dignity and sweetness which belong to the spontaneous utterances of a noble heart." During the last fifteen years of her life she lived very retired in Rome and exercised her profound influence over many of the great men of the Renaissance and particularly over Michelangelo.

Some idea of the place that she held in the cultured society of Italy at this time may be gathered from the fact that in 1528 Castiglione submitted his *"Il Cortigiano"* to her in manuscript for her approval and criticism. She kept it for a considerable time, read portions of it to her friends, submitted others to them and then returned it with the highest praise. She declared that she was quite jealous of the persons that are quoted in the book, even though they were dead. A writer who knew this period very thoroughly and who had studied particularly the lives of the women of the Renaissance declared:

"Vittoria Colonna was indeed a woman to be proud of: untouched by scandal, unspoiled by praise, incapable of any ungenerous action, unconvicted of one uncharitable word. Long in the midst of such religious and political dissensions as divided and uprooted families, she yet preserved in all the relations of life that jewel of perfect loyalty which does not ask to be justified."

Only too often it seems to be the impression that Vittoria Colonna stands almost alone in her supreme nobility of character, but that is only due to the fact that she has been deservedly much talked of. There are, however, many rivals in all that is best among the women of Italy at this time. The charm of certain of these women of the Renaissance can be best understood from the expressions of praise with regard to them that we have from the distinguished literary men of the time. One of them, Elizabeth Gonzaga, had some of the most beautiful things said with regard to her by men whose judgment and critical faculty commend them to the after world as great scholarly writers. In the prefatory epistle to his "*Cortigiano,*" Castiglione says in allusion to the death of this peerless lady, "but that which cannot be spoken without tears is that the Duchess, also, is dead. And if my mind be troubled also with the loss of so many friends that have left me in this life as it were in a wilderness full of sorrow, yet with how much more grief do I bear the affliction of my dear lady's death than of all the rest; since she was more worthy than all and I more bounden to her." Indeed Castiglione's great work was partly written as a memorial to her. Pietro Bembo, recalling the happy days he had spent at her court, says, "I have seen many excellent and noble women and have heard of some who are as illustrious for certain qualities, but in her alone among women all virtues were united and brought together. I have never seen nor heard of anyone who was her equal and know very few who have even come near her."

Every city in Italy possessed some of these noble women at this time. Prominent among those who are not known as well as they deserve is Donna Catarina Fiesco or Adorno of Genoa, one of the saintly women of the time, who, in forgetfulness of self knew how to be so helpful to others in a wise and womanly way that she has been given the title of St. Catharine of Genoa. She was the daughter of one of the noble Genoese ruling families, the Fieschi, the daughter of Conte Giacomo Fiesco, who was Viceroy of Naples and Papal Chamberlain during the first half of the fifteenth century. Catarina was born July 10, 1447, the third of seven daughters whose mother also came from an ancient house of Genoa enrolled in the first Libro d'Oro. Very early she chose to be a religious, but Giuliano Adorno, a son of Doge Antoniotto Adorno, fell in love with her and though his reputation was that of a young blade and sport, he was good-looking and handsome of figure, and Donna Catarina, having seen him several times at mass, fell in love with him. Political considerations helped on the match and indeed seemed to have been most powerful, for after Catarina had been told of Giuliano's wild ways she refused to marry him and finally was married in black, positively declining to don the customary red velvet robe and lavish ornaments of gold and jewels of Genoese brides. Their marriage, as Catarina evidently had dreaded, was not happy and after five years Catarina betook herself to a convent. After her departure her husband went from bad to worse, and finally, cast off by his indulgent father, was reduced to abject poverty and despair. His wife sought him out, lifted him up and together they took a house near the Spedale Maggiore where they received and cared for poor incurables. Five years later her husband died, "his death having paid all debts," and Catarina was elected prioress of the women's department of the hospital. She organized the nursing, reorganized the hospital service, especially as regards the poor, and took her official duties as prioress very seriously. She found time, however, to compose a number of little books for persons in distress of mind and of body, and some of them have been translated into French and Spanish. Her "Treatise on Purgatory," setting forth the strength of Christian piety in the face of death, was published in 1502 and had a wide popularity in the Latin countries of Europe. She wrote a series of dialogues that became very popular and were widely used by the parish clergy in dramatic form in the churches. The two characters in the dialogues were Good and Evil, and from rival pulpits these presented their various claims. The custom of having this dialogic form of church instruction is still extant in

Genoa. In 1509 she died, leaving all of her property and possessions to the hospital, and her body, miraculously preserved, reposes in a superb crystal casket within the chapel of the hospital. Of her, as Edgcumbe Staley says in his "Heroines of Genoa," the well-known Italian proverb has been quoted: *Vera felicitá senza Dio non si da*—True happiness without God there is none.

Another of these distinguished intellectual women of the Renaissance in Italy was the venerable Battistina Vernazza, whose parents were famous for their benevolence and had a high place in the Libro d'Oro de' Benemeriti of Genoa. She was born in 1497. Early in life she showed remarkable talents as a student of Latin and a writer of verses in Latin and in the vernacular. She entered the Convento delle Grazie but declined to take the veil until both her parents gave their consent, and though her father was willing her mother refused to permit her to be separated from her. After her mother's early death she entered the convent and there became noted for her piety and learning. Her writings are mainly controversial and were very famous in her time. Letters of hers to well-known leaders of the Protestantizing party are extant. At the death of her father, her father's considerable fortune came to her. She applied it all to works of charity, and especially in the direction of the rescue of young girls from evil associations. She lived to be ninety years of age and her memory is still so green among the Genoese because of all that she did for the good of the people that in the quarter of the city where she was born the Municipal School for Girls bears her name of Battistina Vernazza.

Even the smaller towns gave birth to great women, and one of the most distinguished women of the Century whose name is very little known, mainly because her modesty would have it so, is Angela of Merici, the distinguished founder of a religious order for the education of girls of all classes, whose work has endured down to our time and whose religious daughters are literally all over the world at the present day. It is probable that the work of no woman of the Renaissance has had so far-reaching an effect as that of this humble village maiden whose one asset in life was her thought for others and for duty. An all too brief abstract of her story will be found in the chapter on Feminine Education.

An important phase of the careers of the women of the Renaissance is the manliness and independence of spirit which became manifest. It was at this time that the word virago was first used but employed not as now as a mark of disrespect, but on the contrary as a high compliment. Catherine of Sforza, whose manly defence of her castle is well known and whose life exhibited a series of thoroughly courageous incidents, was known as the Virago of Forli, though at the same time she was hailed as "the best gentlewoman of Italy." Isabella Gonzaga manifests something of this same heroic vein and Clarice de Medici, the wife of Filippo Strozzi, is in the same group. These women stand out as remarkable, and yet many of the women of the Renaissance exhibited an independence of character which is usually thought to be of much later development.

There are many educated people who are quite convinced that while the Renaissance possessed distinguished women deservedly famous for their unselfish character and their fine moral influence, it possessed an even greater proportion of women whose vices made them a scandal for all time and whose influence was far-reaching for evil. Indeed for many the name of Lucretia Borgia, which has become a byword for everything worst in human life, is supposed to be a better symbol of the Renaissance than that of Vittoria Colonna. Probably the best way—apart from the actual facts in the lives of women already cited—to show the absolute untruth of this very prevalent impression is to take the life of Lucretia Borgia herself, for it makes clear not only how absolutely lacking in historical confirmation are the ordinary traditions with regard to her, but on the contrary how well she deserves to be classed among the great good women of the Renaissance, all the scurrilous abuse of her that has accumulated to the contrary notwithstanding. There is probably nothing that shows how little of trust can be placed in contemporary documents unless these are critically considered, than the complete change of view with regard to the Borgia family, particularly Lucretia, which has taken place in the last few years, as a consequence of the more careful scientific scholarly historical research of recent years.

The facts in Lucretia's life are comparatively few and rather easy to understand. Its first part is shrouded in the calumnies so common with regard to the Borgias. They were Spaniards making their way in Italy and nothing was too bad to say of them. Her later life was all in the limelight of publicity and should be the basis of any judgment of her. When she was about twenty-four after two sad matrimonial experiences she was married by political arrangement to Alfonso, the son of Ercole, Duke of Ferrara. Before that marriage careful investigation as to her character was made and a special envoy sent for that purpose wrote that "there was nothing at all out of the way with Lucretia herself. She was sensible, discreet, of good and loving nature and her manners full of modesty and decorum; a good Christian filled with the fear of God. . . . In truth such are her good qualities that I rest assured there is nothing to fear from her or rather everything to hope from her." After her marriage Lucretia lived for nearly twenty years at Ferrara. When she died in early middle life her funeral was followed to the tomb by all the people of the city, who revered her as a saint and looked up to her as one who had done everything that she could to make life happier for her people. She was buried in the Convent of the Sisters of the Corpus Christi, in the same tomb as the Mother of Alfonso, the Duchess Leonora, of whose goodness we have spoken, and her praises were on every tongue.

Whatever there is defamatory that is said about Lucretia concerns the years before this marriage while she was living at Rome up to the age of twenty-three. A knowledge of that fact alone is quite sufficient to make the stories with regard to her unexampled viciousness very dubious. Gregorovius has recently re-examined all the documents and has completely vindicated her. She was merely the victim of the violent political hatreds of the time. To take the one item of poisoning with regard to which her name has been so infamous and her reputation so notorious, Garnett, in the "Cambridge Modern History," declares that there is only one case in which the Borgias are supposed to have used poison for which there is any evidence, and that is very dubious. With that one Lucretia had nothing to do. In discussing her divorce from Sforza, he says: "The transaction also served to discredit in some measure the charges against the Borgias of secret poisoning, which would have been more easily and conveniently employed than the disagreeable and scandalous method of a legal process."

Some of the tributes to Lucretia Borgia from her contemporaries are highly laudatory. Among her friends were some of the best people of the time. Aldus Manutius praises her to the skies, lauds her benevolence to the poor, her care for the afflicted and her ability as a ruler. There is no doubt at all that she was one of these wonderful women of the Renaissance whose administrative ability must be admired more than any other quality. During the absence of her husband she ruled the State with wonderful prudence, and yet with a justice tempered always with mercy. It was through her that a law was passed, protecting the Jews of Ferrara, that became a model for other similar legislation in the cities of Italy.

It is interesting to trace the change of attitude of mind toward her on the part of those who either did not care for her or were actually bitterly opposed to her. Her sister-in-law, Isabella D'Este, became a real friend, as her letters attest, though at first she did not like at all the idea of the union of the house of D'Este with that of the Borgias, and it required all her father's force of will and all his political astuteness besides to secure her presence at the marriage. The letters of ten years later reveal a most intimate friendship between these two women. Within a year after her marriage she had completely won her husband, who was altogether indifferent at the beginning and who married her because of his father's insistence and entirely for political reasons. When her first baby died at birth her husband was most solicitous for her, anxious about her health and made a vow that he would go on a pilgrimage to Loretto for her recovery, a vow which he fulfilled just as soon as her convalescence was assured.

The biographer of Bayard, the famous French Chevalier of the time, *sans peur et sans reproche,* declared apropos of the visit of Bayard to Madonna Lucretia at Ferrara: "I venture to say that neither in her time nor for many years before has there been such a glorious princess. For she is beautiful and good, gentle and amiable to everyone." Gregorovius declares in his "Lucretia Borgia, According to Original Documents and Correspondence of Her Day":* "Lucretia had won universal esteem and affection; she had become the mother of her people. She lent a ready ear to the suffering and helped all who were in need. She put aside, as Jovius, a contemporary, said, 'the pomps and vanities of the world to which she had been accustomed from childhood and gave herself up to pious works and founded and endowed convents and hospitals.'" She died at the early age of forty, so that the nearly twenty years of service for others represent not the aftermath of a long stormy life, when human passions had burnt themselves out, but the ripe years of maturity and highest vitality.

Caviceo even ventured when he wished to praise the famous Isabella Gonzaga to say that she approached the perfection of Lucretia. He adds, and Gregorovius has emphasized this opinion, "she redeemed the name of Borgia, which now was always mentioned with respect." Indeed there are few women who ever lived of whom such marvellous encomiums have been given by men who knew her well personally and who were themselves often among those in a period of great men and women whose memory the world will not willingly let die. Whatever of evil is said of her is said by writers of scandal and littleness in her own time, Italian enemies of the Spanish house of Borgia, which had come into Italy and had a great success. These vile traditions, the kitchen stories of the Renaissance, were gathered together and preserved because so many people are interested in what is evil rather than good. At a time when the greatness of the period in which she lived was ill appreciated and when religious motives tempted to credulity they came to be generally reported until Victor Hugo gathered them all together for his characterization of her and with Donizetti's opera popularized the idea that Lucretia was probably the worst woman who had ever lived. It has taken much writing of real history to modify this popular notion, which is not yet corrected, and nothing illustrates

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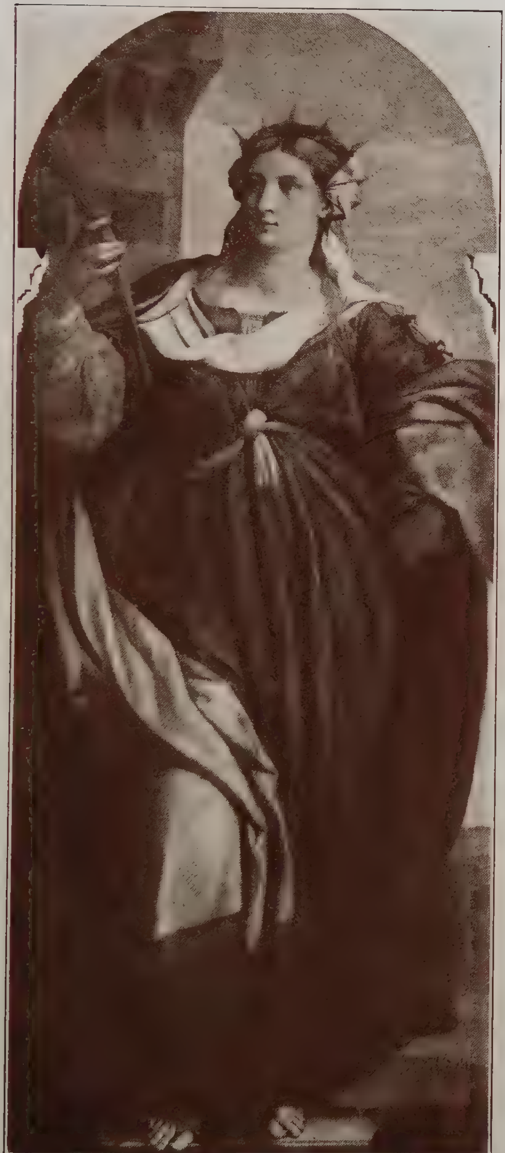
* Translated by Garner, Appleton, 1913, New York.



PALMA VECCHIO, ST. BARBARA

better the fallibility of popular historical information than this Lucretia story.

When she came to die her husband said of her, writing to his nephew in whose regard there was not the slightest question of hypocrisy or pretence: "I cannot write this without tears, knowing myself to be deprived of such a dear and sweet companion. For such her exemplary conduct and the tender love which existed between us made her to me."

The greatest woman of the French Renaissance and probably the most influential of the women of the time, with the possible exception of Vittoria Colonna, was Marguerite of Angoulême. In English-speaking countries she is better known as Marguerite of Navarre, though in France she is sometimes spoken of also as Marguerite of Valois or of France. She was the sister of Francis I, King of France, and devoted in her affection towards him. Undoubtedly it was she more than any other who inspired her brother with the idea of founding the College of France, and it was she who was the patron and guardian of the French Renaissance. After Francis had been captured at the battle of Pavia and shipped as a prisoner to Spain she made the long, perilous, difficult journey that it was in those days from Paris to Madrid with sisterly devotion, and in spite of trying hardships stayed near her brother during his confinement.

The world generally knows her as the author of the "Heptameron" and has condemned her rather severely because of its too great freedom of manners and morals. Our own generation, however, which from its youngest years reads in our daily newspapers much worse stories than Margaret ever wrote, should not be ready to condemn her. It is difficult to understand her writing of these stories unless one knows the conditions of the time. The license that had come in among the novelists led to the telling of many stories that even our age, accustomed to the greatest license in this matter, finds too frank. Margaret, whom her generation has agreed in calling a saint, hoped to undo the evil of such stories by telling them frankly and adding morals to them. The stories have been read and the morals neglected. Her idea was very much the same as the excuse made for the publication of many criminal stories of all kinds in our time, that publicity makes for deterrence. The erroneous psychology of this attempt at justification for a serious breach of ethics is only too patent. Margaret's good intentions in the matter are undoubted. Good intentions, however, do not guarantee that acts will be without evil effects. Margaret was trying to correct the corruption of her time in very much the same way as many women have been aroused into activity in ours, only she made the sad mistake of using the wrong means by thinking that publicity or information would prove a safeguard against evil instead of an incentive to the very forms of vice that she was trying to correct—above all for the young. Her significance in literature is discussed in the chapter on French literature.

Margaret's personal character is one of the most beautiful in history and it fully justifies the praise of her contemporaries and even Vittoria Colonna's words, which would seem fulsome. The most interesting phase of Marguerite's character is her devotion to the sick poor. Down at Alençon the large hospital owed its origin to her and her name was in benediction among the people because of all that she did. Hers was no mere distant service such as a queen might render because of the power she had to employ others, but she devoted herself to personal work for them that made them feel her saintly unselfishness. The king, her brother, gave her a grant for a foundling school in Paris. This was known as *La Maison des Enfants Rouges,* The House of the Red Children, because of the scarlet dresses which were the uniforms. Francis in his grant says that his sister had told him how these little children that had been picked up on the streets of Paris die when they are taken to the Hôtel Dieu and that they need the more special care of an institution for themselves and he is very glad to come to her assistance.

When her own boy died at the age of a few months Marguerite, whose tender family affection can be very well appreciated from her relations with her brother, was stricken with grief. We have the naïve description, however, of the strength of soul with which she bore it: "She went into her room, refusing the aid of any of the women attached to the Court, she thanked the Lord very humbly for all the good it had pleased

Him to do her." She went even farther than that, however, she forbade that there should be any public grief, had the Te Deum sung for joy in the church because the death meant the welcoming into Heaven of an angel and she had placards made to be posted throughout the city bearing the inscription, "The Lord hath given and the Lord hath taken away; blessed be the name of the Lord." And yet she herself wore black after this and never changed it and after a time this became the formal color of ladies' dress at her court.

One of the important women of the century whose administrative ability surpassed that of the men of the time is Mary of Burgundy, whose beautiful tomb is to be seen in Bruges. The monument is one of the gems of the old town, but is not more than befitting the character of the lady it was meant to commemorate. Her dealings with the proud burghers of the Netherlands were those of a sympathetic sovereign trying to assure prosperity to these thrifty towns whose trade made it possible for so many of their people to become wealthy and happy citizens. Had her mode of treating them descended to some of her successors we would have been spared that ugly record of nearly a hundred years of bloodshed and war and famine in the Low Countries, which makes one of the saddest blots on modern history. Her granting of privileges and conferring of rights with recognition of old customs in formal documents is now commemorated in many places in the modern art of the Low Countries, and these constitute her finest tribute and memorial.

The last of the women of this century who deserves to be mentioned and without whom indeed any account of the century would be quite incomplete is probably the greatest of all the women of the period and perhaps the greatest intellectual woman who ever lived. The end of the chapter brings us back to Spain to Teresa de Cepeda y Ahumada, whom the world knows as St. Teresa. It is true that most of her work was accomplished after the close of the century, but as she was born in 1515 and was therefore thirty-five years of age before Columbus' Century closed, receiving all of her training and formation of mind in the great Renaissance period, her place is naturally in this epoch. She is the most important of the women of the Renaissance, though this is seldom realized, and her reputation instead of decreasing with the years has rather increased. Even within the last twenty years a number of lives of her was written in every language in Europe and no less than a dozen of them have appeared in English. The feminists of the modern time have turned to her as one of the great representative women of all time.

It is worth while recording some of the great tributes to her. Her own Spanish compatriots call her lovingly their Doctor of the Church. At Rome at the entrance of the Vatican Basilica where appear in marble the Fathers and the Doctors of the Church you will see one single statue raised to a woman and bearing this inscription, "*Mater Spiritualium*"—Mother of Things Spiritual. It is the statue of Teresa who has been gloriously proclaimed the Mother of Spirituality, the Mistress of Mystical Theology and practically a Doctor of the Church, in the principles of the spiritual life.

The French and the Spanish are almost at opposite poles in their critical appreciations, yet Teresa has been honored almost as much in France as in her native country. Men so different as Bossuet and Fénelon have united in proclaiming her their teacher in the science of the saints and have declared her books, "The Way of Perfection," "The Castle of the Soul," "The Book of Foundations" and "Spiritual Advice," the most wonderful contributions to human knowledge that have ever been made.

Nor was her appeal only to the Latin races in Europe. The German mystics have always found a special attraction in St. Teresa's work and this was true not only among the Catholic students in Germany, but also at nearly all times among the Protestants. In the modern time Teresa has been the subject of many monographs by German writers.

In English, though national feeling and religious prejudice might be expected to make Teresa little known or even deliberately neglected, her works came to be very well known. In the middle of the seventeenth cenutry Crashaw became enamored (no other word will express his lofty sentiments) of her writings and literally thought that no one had ever had so high a vision of things other-worldly. George Eliot paid her tribute in the preface to "Middlemarch," and while her own dissatisfaction with life makes that tribute somewhat grudging and half-hearted, there is no doubt that our greatest woman novelist of the nineteenth century had been very deeply influenced by the writings of the calm light of the sixteenth.

Scarcely any writer has had as wide a European influence as this cloistered saint, who wrote only because her confessor commanded her to and who had no thought of style or of anything other than getting the thoughts that would come to her as simply as possible before her Spanish religious brethren. Her Spanish prose is a marvel of simple dignity and correctness representing the best Spanish prose, even down to our time. When Echegaray, the well-known Spanish novelist of our time, received the Nobel Prize for literature a few years ago, he was asked what he did for the perfection of his Spanish style. He declared that almost the only book that he read for the sake of its style was "The Letters of St. Teresa." We have nothing quite like these letters in English, though Cowper's letters approach nearest to them. They are full of simplicity, are deeply interesting in their detail of ordinary life and above all are full of humor. This is the quality that most people would be quite sure was lacking in the great Spanish nun. Those who would explain her visions and her mortification on the ground of hysteria or psychoneurotic conditions would be undeceived at once in their estimation of her character did they but read her letters. The hysterical are above all lacking in a sense of humor and take themselves very seriously.

Dante is probably the only writer in European literature with whom St. Teresa can properly be compared. She has the same power to convey all the deep significance of otherworldliness, the same universality of interest, the same marvellous quality that draws to her particularly those who are themselves of deeply poetic or profoundly spiritual nature. Men who have spent long years in the study and the experience of the things with which her writings are concerned, find them most wondrously full of meaning and are most willing to devote time to them. The editions of her various works would fill a very large library, and there is no doubt at all that the writings of no woman who ever lived occupy so large a place in libraries all over the world at the present time as those of St. Teresa.

Beside St. Thomas and Dante as a worthy member of a glorious trinity of writers, with regard to the subjects that have been most elusive though most alluring for men, St. Teresa deserves a place. Anyone who would think, however, that she was merely a mystic would be sadly mistaken in the estimate of her career. She was above all a thoroughly practical woman. Her many foundations of the reform Carmelites under the most discouraging circumstances show the indomitable will of the woman and her power to live to accomplish. It was she who said when her poverty was urged as a reason for not making further foundations, "Teresa and five ducats can do nothing, but Teresa with God and five ducats can do everything." There is no doubt now that she more than any other in Spain turned back the tide of the Reformation. Her advice was eagerly sought on all sides. While carefully maintaining her cloistered life, she made many friends and influenced all of them for what was best in them. Her reform of the Carmelites brought many enemies, above all because other religious orders recognized that they too would have to share in the reform, yet all was carried out to a marvellously successful issue with gentleness and sweetness, but with a firmness and courage that nothing could daunt and a power of accomplishment that nothing could balk.

Those who think that Teresa's books are mere essays in pietism or pleasant reading for moments of spiritual exaltation will be sadly mistaken. For depth of meaning and profundity of aspiration after the unknowable, yet approaching it nearer than any other has ever done, St. Teresa's books are unmatched. For analysis of the soul and for the manner of its unfolding in its strivings after higher things, Teresa has no equal. Her pictures of celestial things are a constant reminder of Dante. Most people think of the "Inferno" as Dante's masterpiece. Those who know him best think rather of the "Purgatorio," but a few lofty, poetic souls, steeped in the spiritual, have found his "Paradiso" the sublimest of human documents. While there are constant reminders of the

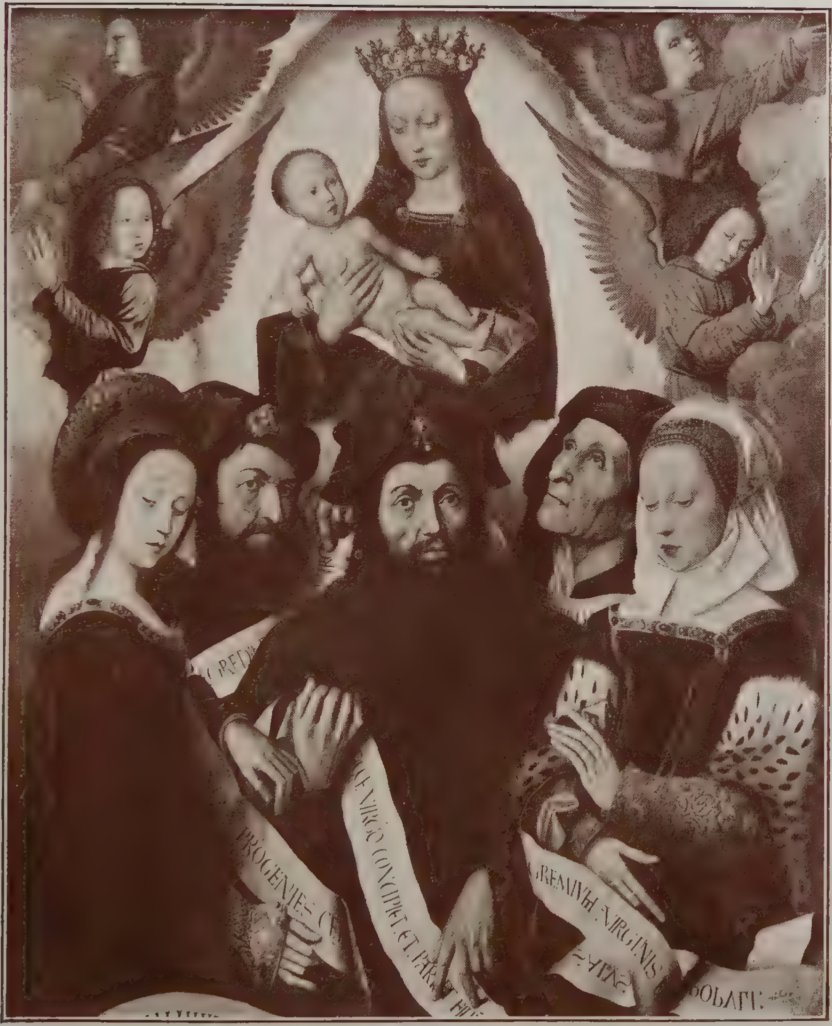
"Purgatorio" in many of Teresa's writings, it is the "Paradiso," however, that most frequently recurs in comparison. What Cardinal Manning said of the "Paradiso" may well be repeated of Teresa's mystical works. It has been said, "After the '*Summa*' of St. Thomas nothing remains but the vision of God." To this Cardinal Manning added, "after the 'Paradiso' of Dante there remains nothing but the beatific vision." Those whose life and studies have best fitted them as judges have felt thus about the Spanish Doctress of the Church.

Teresa was eminently human in every regard, and though what might be considered harsh with herself, she was always kind to those who were around her, and especially any who were in real suffering. She came by these qualities very naturally, for her father is noted as an extremely good man and exceptionally good to his servants and charitable toward the poor of Avila. Indeed Teresa's biographers insist so much on these qualities as to make it very clear that the spirit of the time is represented by this member of the old Spanish nobility, who took his duties towards others so seriously. Teresa was not one of the exceptional souls who find convent life easy and even consoling from the beginning, but on the contrary she has told herself that she found the first eight days of her convent life terrible. It seemed to her a prison. She had a physical fear of austerities and pious books bored her. Perhaps the one very human thought that tempted her more than any other to enter the convent was her feeling of independence. The idea of marriage was quite distasteful. As she expressed it, it was one thing to obey God, but quite another thing to bind oneself to obey a man for a lifetime.

As if in compensation for all that the neurologists and psychiatrists had to say of her, she herself had something to say of nervous patients. For her, nervousness so-called was largely selfishness. While sympathetic for feelings of depression, she had no sympathy for those who would not throw them off by occupation of mind, but yielded to them. She said, "What is called melancholy is at bottom only a desire to have one's own way." She believed firmly that one could not be made good by many rules, but goodness had to come from within and from the spirit. She was quite impatient with the religious visitors, that is, special superiors sent to make inspections of houses of religious who gave a number of new rules for the communities. She said: "I am so tired with having to read all these rules that I do not know what would become of me if I were obliged to keep them."

It is easy to understand then why Cardinal Manning should have said that St. Teresa furnishes an example that "spirituality perfects common sense." She herself was one of the most sensible, joyous and charming persons. Miss Field in the *Atlantic* for March, 1903, says: "Her charm, her sweetness, the loveliness of her conversation were irresistible." It was Cardinal Manning, I believe, who declared that "she was one of those sovereign souls that are born from time to time as if to show what her race was created for at first and to what it is still destined."

Teresa once said: "God preserve me from those great nobles who can do something, yet who are such strange cranks." She reminded her nuns on more than one occasion when she found in them a tendency to go to too great lengths in austerity that we have a body as well as a soul, and that this body when disregarded revenges itself upon the soul. There are few subjects of importance in life on which St. Teresa has not expressed herself wisely, and to know her writings is to be able to quote many marvellous summations of worldly experience that the cloister might seem to have precluded in her. On the subject of the relation of low wages and virtue, Miss Repplier in the article on "Our Loss of Nerve" *(Atlantic Monthly,* September, 1913) quoted St. Teresa's profound comment which sums up so well our whole social situation "where virtue is well rooted provocations matter little."



MOSTAERT, VIRGO DEIPARA (ANTWERP)

CHAPTER IX

FEMININE EDUCATION

There is probably no more interesting phase of Columbus' Century for our time than its feminine education, for the education of women had a period of important development in the fifteenth and sixteenth centuries which affected a very large number of women of the time and afforded abundant opportunity to all those who wished to obtain the highest intellectual culture. This was not, in spite of the apparently very prevalent impression to that effect, the first time that women had been given a chance to secure the higher education, for on the contrary whenever there was a new awakening of educational interest, women asked and obtained the privilege of sharing in it and showed how thoroughly they could take advantage of such opportunities as were afforded them. In the early days of the universities women had been welcomed not only among the students but also the professors. They had full charge of the department of women's diseases down in the south of Italy where the most important part of the university was the medical school, and then later at Bologna they had been professors in every department,—in law, when the law school was the central university feature, in mathematics, in literature, even in anatomy. As a consquence of the tradition thus established there has never been a century since the twelfth in which there have not been distinguished women professors at some of the Italian universities.

Earlier when Charlemagne was reorganizing education on the continent with the help of the Irish and English monks, the women of the court attended the palace school as well as the men, and we have many records of their interest. The women of the Benedictine monasteries shared the interest of the Benedictines generally in literature, made many copies of books, possessed large and important libraries and even became distinguished as writers. Hroswitha, the nun dramatist of the tenth century, who came into prominence in Columbus' Century because of the issuance of an edition of her work by Celtes, the German Renaissance humanist, is but one example of the literary interest in the Benedictine convents which must have been ardent and widespread. Later we have the works of the great Abbess Hildegarde, who wrote on many subjects and who was probably the most important writer of her time. This is certainly true so far as physical sciences are concerned. St. Bernard, who was her contemporary, has enjoyed more reputation in subsequent generations than Hildegarde but she was almost as well known in her own as the great founder of the Cistercians.

Earlier still than Charlemagne or the foundation of the convent schools St. Brigid had established a college for women at Kildare, in Ireland, to which there came many of the nobility not only of Ireland itself but also of England and of the neighboring shores of Europe, seeking the opportunity for higher education. We have learned more of the details of this Irish phase of feminine education in recent years, and it has grown ever more and more important in the history of education.

At every new phase of educational development, then, the women had had their share in the movement, and it is not surprising that when the Renaissance brought with it that deep interest in the ancient classics, that was known as the New Learning, women also had their share in this. The very first of the great Italian teachers of the Renaissance Vittorino da Feltre insisted that there should be two conditions for his teaching. One was that the young women should be allowed to take advantage of it as well as the young men and the other that the poor who desired to study should not be denied access to his classes. The magnificent success that he made of education at Mantua was soon followed by similar movements in other Italian cities and everywhere the tradition of feminine education for those who desired to have it, came into existence. Guarino's influence for feminine education is only less than that of Vittorino. As a consequence there was not a city of any importance in Italy in which there were not some women noted for their knowledge of the classics and their interest in the New Learning, and in many of the cities there were distinguished woman students who, even in their early years, exhibited scholarly qualifications that made them famous.

Vittorino da Feltre, the great teacher of the beginning Renaissance, had during the first half of the fifteenth cenutry a school at Mantua, where on the border of the lake he was teaching a group of noble youths and maidens according to the high ideals of education which he has so well laid down. Their course of study included Latin, Greek, philosophy, mathematics, grammar, logic, music, singing and dancing. Besides this, however, his scholars were taught " to live the simple life, to tell the truth and to remember that true scholarship was inseparable from virtue and a sense of lofty gratitude towards the Creator." As might have been expected from the Greek traditions of education, which were then attracting so much attention, the training of the body was not neglected and various outdoor games were insisted on so that there might be a healthy mind in a healthy body.

Some of the traditions of that school at Mantua make very interesting reading and show how much some of the intervening periods in the history of education degenerated from those early days. For instance, we hear that not infrequently when Vittorino wanted to make a passage of Virgil impressive his scholars were taken out to Pietole, which has been identified as probably the village of Andes, in which, according to Donatus, Virgil was born, and here in the shady groves Virgil would be read and discussed and then there would be games and a return to the castle. While Vittorino was broad in his selections in the classic authors, and Virgil and Cicero and Homer and Demosthenes were read with explanations and then certain passages required to be learned by heart so as to form their style, he was no pedant and no friend of any exhibition of mere erudition. His most important bit of advice for his students was " First be sure that you have something to say, then say it simply." No wonder one of the D'Estes declared " that for virtue, learning and a rare and excellent way of teaching good manners, this master surpassed all others."

It would be easy to think that perhaps the young noblewomen of the time got but a very superficial knowledge of the classics, but we have a tradition of Cecilia Gonzaga, the daughter of the reigning house of Mantua and Vittorino's favorite pupil, that she could read Chrysostom at the age of eight and could write Greek with singular purity at the age of twelve. No wonder we hear of her later as the marvel of the age. Evidently all prejudice with regard to feminine education was at an end when Bembo said: "A girl ought to learn Latin, it puts the finishing touch to her charm."

Sandys in his Harvard lectures on the Revival of Learning, has told the story of some of these young women scholars of Vittorino da Feltre and Guarino with some interesting details which show that success in scholarship did not prove an inflater of vanity in the young women of the time nor impair their religious spirit.

"Women, as well as men, retained a grateful remembrance of the intellectual training, which they had received from Guarino and Vittorino. Vittorino's pupil, Cecilia Gonzaga, a daughter of the ruling house of Mantua, whose fresh and simple grace may be admired in the medallion of Pisanello, was already learning Greek at the age of seven; while, among the pupils of Guarino, Isotta Nogarola was skilled in Latin verse and prose, and quoted Greek and Latin authors in the course of those learned letters to her tutor, which were not entirely approved by the public opinion of Verona. In cases such as these, the studious temper was often associated with retiring habits and with strong religious feeling; and, like Baptista dei Malatesti, the former correspondent of Leonardo Bruni, both of these learned ladies ultimately took the veil."

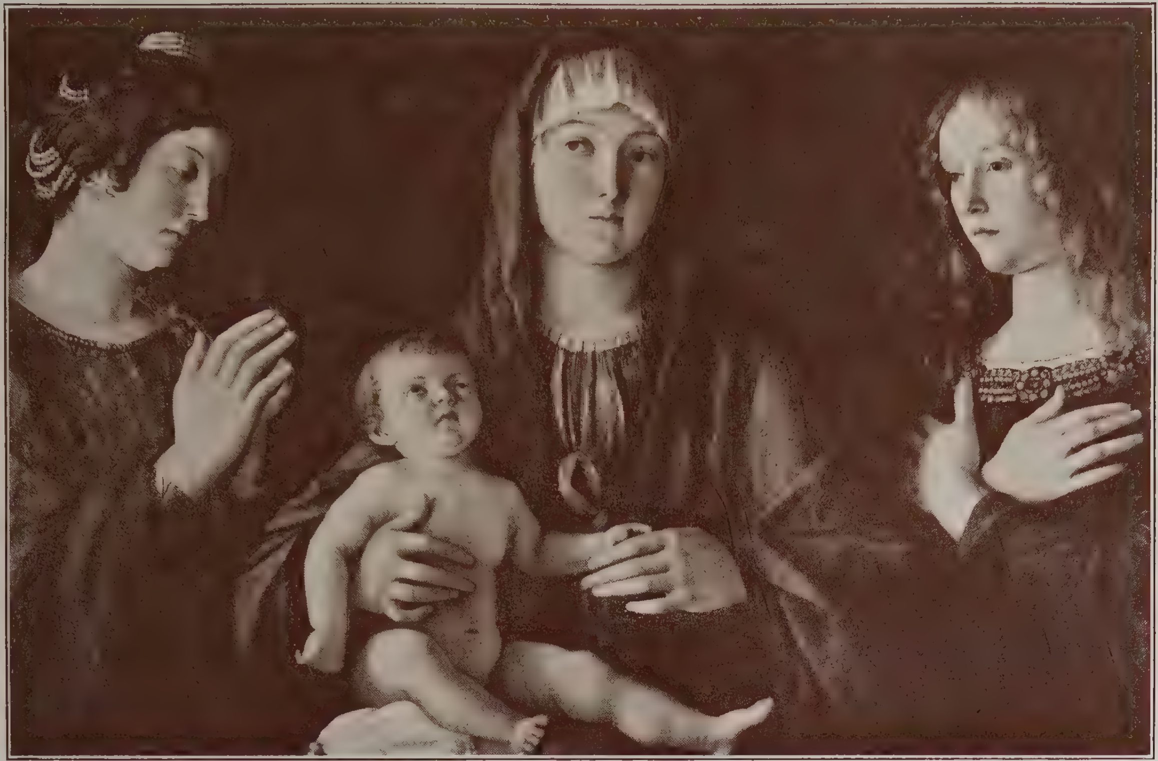
While so much attention was paid to the classics, the great Italian authors were not neglected and the Italian girls of the Renaissance were brought up to know the classic literature of the vernacular. It was the custom to have Dante and Petrarch and Ariosto read to them while they were doing embroidery, and these charming young women of the Renaissance in every country in Europe had the reputation for doing most wonderful embroidery. They also learned to play on various musical instruments, and their voices were cultivated to the best possible advantage. It is often a source of wonder where they got the time to do all these things. Some of the letters from the French and Spanish ambassadors at these various Italian courts tell of the marvellous ability of these charming young women. As a rule the ambassador's idea in writing such descriptions was to suggest the possibility of marriages being arranged between the scions of the noble houses of their own countries with these women. It was rather important, therefore, that there should not be much exaggeration or the ambassador might well be discredited.

It is easy to think that with all this of intellectual life the young women of the time must have had very little exercise, especially in the outer air, and above all must not have indulged in what we think of as sport. The story of Vittorino da Feltre's school is a contradiction of this, and besides the traditions that have come to us show that every young woman of the nobility learned to ride horseback at this time. All of them could ride boldly. They hunted and many of them went hawking. Riding was of course an absolutely necessary accomplishment at that time, for carriages were very rare, and such as there were were almost impossibly uncomfortable for long journeys. Good roads had not as yet been made outside of the towns, and the only way to go visiting friends at any distance was on horseback. Many of these young women had to travel long distances, especially at the time of their marriage, and later on they sometimes accompanied their husbands on rather long journeys.

In spite of their reputation for scholarship, we have not any very serious remains of their intellectual efforts, and yet some of them wrote poetry and prose well above the average in merit, and at least in Italy their works are still read by students of Italian literature. For instance, we have the poems of Lucretia de Medici, the mother of Lorenzo the Magnificent, who had been one of the Tornabuoni family, merchant princes of Florence, with many of the solid virtues of the middle class from which she sprang. Tradition tells us that she was ever her great son's most trusted councillor, and he has left it on record that he thought her the wisest. She was noted for her princely alms, her endowment of poor convents, her dowries to orphan girls, and though it has sometimes been said that these were all so many bids for popularity, any such discount of her good works wrongs her deeply, for she was profoundly religious, took particular care to bring up her children piously, and it is to the fact that she wrote hymns for them that we owe the poetic works that have come to us and which rank high among this form of poetry.

The best known of these women of the Renaissance, that is, the most famous for their learning, were the sisters D'Este, Isabella and Beatrice, of whom we have so many interesting traditions. The famous Battista Guarino of Verona was chosen as teacher for the girls, and with him they learned to read Cicero and Virgil and study the history of Greece. They learned Italian literature from the many distinguished literary men, some of them themselves gifted poets, who came to the beautiful palace and its gardens at Ferrara, and were welcomed by the well-known patron of learning, the Duke of Ferrara. They learned to read French at least and to enjoy Provençal poetry. Their mother, Leonora of Aragon, the daughter of Ferdinand, or as he is sometimes called, Ferrante, King of Naples, was herself a scholarly woman. The traditions of scholarship at the Court of Naples were deep, and of long duration. As their father was the famous scholar and patron of learning, Duke Ercole I, there was a precious heritage of culture on both sides. Their mother, however, was more known for her piety even than for her learning, though this was so noteworthy as to be historical. Her charities made her looked up to by all of her people until it is not surprising that the chroniclers of her time speak of her as a saint.

Often it is said that only a few of the daughters of the nobility had the opportunity for the higher education, and it is even the custom to declare that most of these were instances where fathers had expected sons instead of daughters and then raised the girls as companions and gave them the education that ordinarily was reserved for boys. George Eliot's picture of the times as given in "Romola," has sometimes emphasized this, and she herself seems not to have been quite able to persuade herself that there were liberal and abundant



BELLINI, MADONNA, ST. CATHERINE AND MARY MAGDALEN (VENICE)

opportunities for the education of women in Italy towards the end of the fifteenth century. It was so difficult in her (George Eliot's) time for a woman to obtain education that it was almost impossible to bring oneself to think of ample facilities existing nearly four centuries before. Anyone who reads Burckhardt, however, or indeed any of the modern writers on the Renaissance, will not be likely to think that education was reserved for single daughters of families, or that they indeed had any better opportunities than others except for the fact that family attention was centred on them as it is now. Burckhardt notes that it was especially the wives and daughters of the *condottieri,* that is, of the hired leaders of armies, the self-made men of the time, who were lifting themselves up into positions of prominence, who were the most frequent among the educated women of the Renaissance.

The records are complete enough to show that there was probably as much, if not more, feminine education in Italy at least than in our own time. This will probably be hard for many people to believe, but, as I have said, no important city was without it. What may be called the important cities of that time nearly all contained less than 100,000 inhabitants and many of them had not more than ten to twenty thousand. When one finds schools for the higher education of women in every one of these it is easy to understand how widely diffused the feminine movement was. Lest it should be thought that the education provided for or allowed the women of the time was narrow in its scope, with so many limitations that intellectual development in the true sense of the word was hampered, it may be as well to recall that women were even encouraged in the public display of their talents. We read of the young princesses and their court attendants taking part in Latin plays given before the Pope and other high ecclesiastics, as well as visiting rulers at this time. We have the story of Ippolita Sforza saluting Pope Pius II, who had been the scholarly Æneas Sylvius before his elevation to the pontificate, with a graceful Latin address when he came to the Congress at Mantua. Another of the oratorical princesses of the time was Battista Montefeltro, who is famous for addresses delivered on many important occasions.

While the D'Estes have been probably better known, historians declare that the women of the House of Gonzaga reached the highest excellence in this Renaissance period of feminine education. Everywhere, however, woman received the opportunity for whatever education she desired. Down in Naples the old Greek traditions had survived, and when the disturbance of the Grecian Empire by the Turks brought about a reawakening of Greek culture in the south of Italy, the women shared it as well as the men. At the Court of Joanna or Giovanna, whose career is of special interest as an anticipation of the ill-fated Mary, Queen of Scots, many of the women reached high intellectual distinction. It is to these lofty Neapolitan educational influences that we owe the intellectual development of Vittoria Colonna. Everywhere, however, the same story might be told. At Rome, at Florence, at Verona, at Padua, even at Forli and Ravenna and Rimini, as well as at Genoa, though Genoa was so much more intent on making money than developing its culture, the women took excellent advantage of the opportunities for learning, often proved to be more successful in their studies than their brothers, and though they did not accomplish much that was to endure in the intellectual life, they seem to have been thoroughly respected by their contemporaries and looked up to as cultured, scholarly personalities.

In his "Heroines of Genoa and the Rivieras," Edgcumbe Staley* has said something of the productivity of the literary women even of Genoa during this period. Genoa was known as probably more interested in mere luxury and less interested in the intellectual life for its own sake than any of the cities of Italy with which we are familiar. The Genoese were the merchant princes whose wives and children, like our own, were much more occupied with the display of their wealth than in the development of a taste for art and letters and the cultivation of a true critical faculty. I have already mentioned some of the products of the Genoese intellectual life among women, however, and this will add to the impression that I think is so true that in proportion to the population there were just as many women interested in education and in literature, women writers and poets in that time as there are in our own. Mr. Staley said:

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* Scribner & Sons, New York.

"Among the glittering bevies of intellectual and virtuous damsels, who delighted in the beauties and revelled in the romances of the Villetta di Negro and similar pleasures, were such *gentildonne* as Peretta Scarpa-Negrone and Livia Spinola, who wrote poems of the heart and the home; Benedetta—Livia's sister—and Caterina Gastadenghi—she sang and played the folk songs of Liguria; Leonora Cibo and Pellegrina Lescara, sweet translators of the 'Aeneid' of Virgil and the 'Odes' of Horace."

These educated women of the Renaissance were particularly noted for the application of their education to the concerns of their home. Their artistic taste was exercised, as we have already shown, in selecting various ornaments for it and in directing artists in its decoration. They did not have many art objects around them, but what few there were had been made as a rule by distinguished artists and represented something of the personality of the mistresses of the household. But it must not be thought that they devoted themselves exclusively to the cult of beauty in things. They realized their influence for good over the men of their time and exercised it. The example of Vittoria Colonna is often cited in this regard, but not because it is exceptional, rather what was characteristic. These educated women of the Renaissance were model wives and mothers. They were sedulous for the education of their children, and the poetry that we have from them, or the letters that have been preserved, and which show very clearly their high intellectual development, were meant for their children or for their relatives. Their homes were evidently always their first thought. They planned their own dresses, often executed some of the decoration for them, or had them designed or made under their direction, bought beautiful books for the home, encouraged the illuminators and the embroiderers and beautiful needleworkers of the time, and in general proved to be ready and able to help through their households to give opportunities for the artists, but also for the artisans and the arts and crafts workers of the time.

We find a number of their names on the list of Aldus' regular customers at Venice, his subscribers, who made it possible by assuring him at least the cost of his books to go on with his magnificent editions of the classics. We have letters in which they complain of the cost of these first editions because there were other household expenses to be met, but undoubtedly they were always greatly helpful in the educational cause.

Most interesting perhaps of all that they did is the beautiful gardens, which, now that our generation through better transportation facilities is able to live out of town, are coming to be more properly appreciated than before. The Renaissance gardens have been the subject of much writing and illustration in our magazines and books in recent years, and it must not be forgotten that we owe them above all to the women of the Renaissance. They invited artists and architects, who designed them, and trained landscape gardeners to execute them, but it was their interest that was most important. Their gardens came to be an enlargement of their houses, and in the sunny land of Italy afforded many refuges for pleasant living, even in the warmest weather, and for the privacy of even their crowds of guests, which made their homes welcome repairs for the nobility of the time.

Perhaps the best criterion of the thoroughness of the education given women at this time is the influence exerted by the women of the period on art and artists and literary men of the time, and above all the cultivated taste displayed in their homes. A typical example is afforded by Isabelle D'Este whose *camerini,* her private apartments, are reproduced at South Kensington and described in one of their manuals on Interior Decoration in Italy in the fifteenth century and the sixteenth century. As these decorations for the dowager Duchess D'Este were made just about the middle of Columbus' Century, the authoritative description of them will be the best document. The Museum of South Kensington has had one side of her painting room reconstructed, and it shows, as no mere description could, the beauty of the apartment and the taste of its owner.

A quotation from the description of the three rooms as given in the South Kensington Art Handbook "Italian Wall Decorations of the Fifteenth and Sixteenth Centuries" will serve better than any praise to give an idea of the charming retreat that Isabella made for herself when her position as Dowager Duchess gave her the leisure as well as the opportunity to devote herself to the construction of a retreat which should reflect her personality.

"The 'Grotta,' on the ground floor of the old Palazzo Bonnacolsi, remained set apart for her collections of art and for receptions; princes on their travels, ambassadors on their missions, travellers of distinction and artists came to visit her. She accumulated in it statues and rare objects, and even added a 'Cortile,' with fountains playing during the summer. But the three new rooms at the top of the 'Paradiso' became the object of her predilection, and it is amidst such surroundings, the real 'paradise' of Isabella D'Este, that historians must place her portrait.

"The first room was dedicated to music, the favorite pursuit of Isabella. The cupboards were filled with beautiful instruments: mandolines, lutes, clavichords inlaid with mother-of-pearl, and made specially for her by Lorenzo of Pavia; and here stood the famous organ by the same master, the description of which is to be found in the princess's correspondence. Round the walls of this first room were reproduced views of towns in 'intarsia' of rare woods, and on one of the panels figured a few bars of a 'Strambotto,' composed by Okenghem to words dictated by Isabella, and signed by that famous singing master. On the ceiling was the 'Stave,' which exists in the coat-of-arms of the House of Este, and along the cornices friezes were formed of musical instruments carved in the wood.

"In the second room, devoted to painting and also to study, six masterpieces by the greatest painters of the time adorned the walls above the panelling.

"The third room was reserved for receptions. Everywhere in the ceiling, in the compartments, in the friezes (delicately carved in gilded stucco upon an azure background) are found the devices commented on at length by the humanists of her court: 'Alpha and Omega' and the golden candlestick with seven branches, on which a single light has resisted the effects of the wind, with the motto, *'Unum sufficit in tenebris;'* and everywhere is to be read the mysterious motto of which she was so proud, '*Nec Spe nec Metu,*' the highest resolution of a strong mind, which henceforth 'without hope, without fear,' ended in solitude a tormented life. In the recess of the thick wall slightly raised above the floor, Isabella placed her writing table within reach of the shelves containing her favorite books; while she read there or wrote those letters addressed to the poets and artists of Italy, overflowing with enthusiasm for arts and letters, when she lifted her eyes beyond the tranquil waters at the mouth of the Po, towards Governolo, she would see coming the gilded Bucentaur with the coat-of-arms of Ferrara, which brought her news of her family, D'Este, and that of Aragon."

Lucretia Borgia at Ferrara not only continued the tradition of æsthetic good taste so characteristic of the D'Este family into which she had married, but even her years as mistress of the palace at Ferrara mark an epoch in its history. She succeeded in securing the services of some of the greatest of the artists of this wonderful period, who came and contributed to the decoration of her private apartments. Unfortunately her *camerini,* private apartments, in the Castello Rosso of Ferrara were destroyed by fire in 1634. They had been adorned with paintings by Bellini, Titian and Dosso Dossi, fitted into recesses of white marble carved by Antonio Lombardi. These rooms as elsewhere were of small size, real living rooms, reflecting the character of the personal taste of the owner. They were sanctuaries of art and of literature with selected libraries of chosen volumes in fine bindings and of music with beautiful musical instruments.

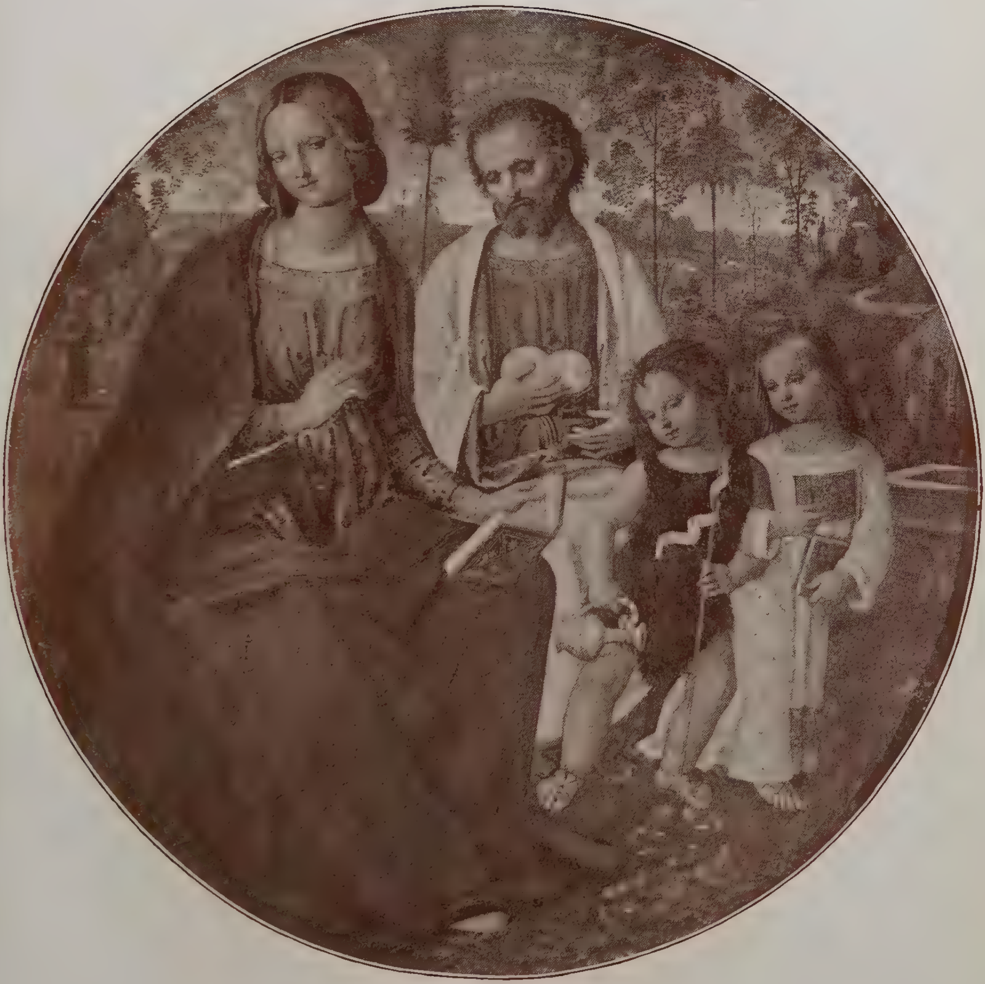
Many of these women of the Renaissance in Italy were famous for their devotion to works of charity. Indeed I know nothing that is more admirable than the story of their care for the ailing poor. It is often presumed that between their interest in education and literature and the artists of the time, and above all their devotion to the pleasures of dress and decoration, silks and jewels and perfumes, then coming in so rapidly from the East, these women must have had very little time for anything but selfish display of their personal beauty or intellectual talent. The rapid accumulation of wealth, proportionally at least as great as in our time, might very readily be supposed to direct them as it has many other generations from the more serious side of life. The actual story of their lives is very different. There were exceptions, who have unfortunately attracted more attention than others, of whom little that is good can be said. The proportion, however, who devoted themselves with a nobility of soul that deserves to be commemorated to unselfish care for those who needed it was very large. Mr. Staley in his "Heroines of Genoa" (p. 225) has a paragraph on this subject which well deserves to be recalled, for it refers almost entirely to the women of Columbus' Century, and it must not be forgotten that Genoa was much more of a commercial city, with a more rapid rise in wealth, than any other in Italy except possibly Venice, and the beautiful spirit of personal service for the poor is therefore all the more admirable.

"Women in every age and land are prone much more to works of mercy and religion; of such surely was 'the crown of daughters of Genoa'—so-called by many writers. Benedettina Grimaldi, 'chaste, self-denying, amiable, charitable, moderate in dress and personal pleasures,' a munificent patroness of the great Ospedale di Pammatone, nursed patients suffering from plague and leprosy and endowed beds for their treatment and alleviation; Argentina, daughter of Signore Opicio Spinola, and wife of the Marchese di Monferrato: Violanta, daughter of Signore Gianandrea Doria; and Isabella, daughter of Signore Luca Fiasco, and wife of Luchino, Prince of Milan, were contemporaries in the beneficent field of charity. Devoted to the offices of religion, they proved the sincerity of their faith by their eleemosynary services to sick and dying men and women in prison and to debased mariners in port. Benevolent institutions were founded and endowed, under the style of 'Le Donne di Misericordia,' in 1478 and in 1497, 'La Campagnia del Mantiletto'—'Wearers of the Veil,' by the munificence of noble-hearted women. All these threw open to the suffering objects of their regard the healthful pleasure grounds of their villas, and it was no rare sight to find a lady, fashionably attired, seated under the colonnade of a temple, or beneath a shady tree, talking to and cheering poor and friendless sufferers."

The names of the princesses who were prominent in the feminine education of this time have led many to conclude that only women of the higher classes were given the chance to be educated at this time. To a certain extent this is true, but at all times it must be true, for they alone have the leisure for the intellectual life. To recall what the nobility of Italy were at this time is to appreciate better the real situation. They were the successful merchant-bankers and their descendants (as the House of Medici), leaders of victorious armies, the scions of old families, who had made their influence felt in the politics of their cities for from three, sometimes even less, to ten, rarely more generations, the children of great navigators or admirals, even of successful traders and manufacturers—as the glass makers of Murano and the merchant princes of Genoa—in a word they represented exactly the same elements of the population as our better-to-do classes of to-day. It was the daughters of these who were accorded and took so well at this time the opportunity for education and culture.

Besides these there were not a few of what may be called the lower classes who became famous for their scholarship. This had always been true in Italy particularly. Catherine of Siena was a dyer's daughter. Dante's inamorata and her companions, whom we think of as cultured because of the poems addressed to them, were the daughters of men in trade. But in the Renaissance the opportunities even for the comparatively poor to obtain education were greatly widened, and it is evident that any of the young women of the time who had the ambition for learning might obtain it and undoubtedly many of them did. The tradition created by Vittorino da Feltre, according to which women and those of less means might obtain education, maintained itself and proved the seed of further developments in the liberal provision of opportunities for education for all classes.

The names of a number of women scholars have come down to us who did not belong to the higher nobility, and some of



PINTURICCHIO, HOLY FAMILY (SIENA)

their achievements have become a part of the great tradition of scholarship of the time. Alessandra Scala and Cassandra Fedele, for instance, were among the most learned correspondents of Politian and were looked upon as ladies with whom deep questions of scholarship might be discussed seriously. Domitilla Trivulzio delivered Latin orations before thronged assemblies and women orators were quite common. The tradition that women should not speak in public did not obtain at all at this time in Italy and we hear much of their eloquence. The impression so prevalent at the present moment, that this is the first time in history that women have dared to proclaim their rights publicly, is quite erroneous and is founded on a deep ignorance of realities, with a corresponding characteristic presumption of knowledge. Isotta of Verona took part in public controversies with regard to the relative value of men and women in life. It is strangely familiar to find that, for instance, one of the subjects which she discussed was whether man or woman was most to be blamed for what happened in the Garden of Eden, and still more familiar to find that her argument was that man was the responsible party. These learned women, however, were touched also by the tender passion, and one of the most distinguished of the feminine scholars, Veronica de Gambara, comes down to us in history as a pattern of conjugal faithfulness, while Gaspara Stampa, the distinguished poetess, according to tradition, died of love.

One of the little known scholars among the Women of the Renaissance, who deserves a better fate than oblivion, is Olympia Morata, a veritable prodigy of learning. She received most of her education at the court of Duchess Renée at Ferrara. When she came, at the age of twelve, to be the companion of the Duchess's daughter, she was already familiar with Greek and Latin literature. This is surprising enough, but her subsequent progress is even more remarkable. "At fourteen she wrote Latin letters and essayed to imitate the dialogues of Cicero and Plato. At sixteen she lectured at the University of Ferrara on the Ciceronian Paradoxes" (Sandys). At twenty she married a good German, of whom almost the only thing we know is that he was her husband, and she died at the early age of twenty-nine at Heidelberg. When her literary remains were collected they were dedicated to one who was reputed "the most learned lady of her age, Queen Elizabeth of England."

The movement for the education of women of this time would have been quite incomplete, however, if the women themselves had not taken part in the organization of feminine education. In treating of "The Women of the Century" I have already suggested that this important element of feminine education was not lacking. There is abundant evidence of the presence and enduring work of at least one great woman educator, in the sense of an organizer of educational methods, whose influence has been continuously felt in many parts of the world ever since and whose work is not only alive in our time but has shown its power to adapt itself even to the needs and demands of the twentieth-century woman. This is, after all, only what might be expected of an educator of this time, since the other accomplishments of her contemporaries have proved so lasting in their effects.

This very interesting woman of Columbus' Century, whose life is comparatively little known, though her work occupies a very important place in the history of education ever since, was Angela Merici, the foundress of the Ursulines. When twenty years of age this daughter of the lesser Italian nobility became convinced that the great need of that time was the better instruction of young girls in Christian doctrine and their training in a thoroughly Christian life. She converted her home into a school, where at certain hours of the day she gathered all the little girls of her native town of Desenzano, a small municipality on the southwestern shore of Lake Garda in Lombardy, and gave them lessons in the elements of Christianity. The work, thus humbly begun, proved to have so many factors of worth in it that it very soon attracted attention. Before long she was invited to the neighboring city of Brescia to establish a similar school, but on a much larger scale and more ambitious scope. She did so all the more willingly because one day during her earlier life in the small town of Desenzano she had had a vision in which it was revealed to her that she was to found an association of young women who would take vows of chastity and devote their lives to the religious training of young girls.

After years of patient waiting and thoughtful consideration of the subject of organizing the education of young women and providing for continuance of her work—the delay mainly due to the fact that Angela feared that she might not be capable of accomplishing it properly—she came to the establishment of a religious order that would take up this service. When the constitutions which she had written were presented to Paul III, the Pope, who in spite of his resolve not to increase the number of religious orders, had felt compelled to approve the Jesuits after reading their constitutions because, as he said, he perceived "the finger of God is here"; also found himself forced to approve of those written by Angela Merici, saying to St. Ignatius, the founder of the Jesuits, as he did so, "I have given you sisters." What the Jesuits did for the education of young men during the next two centuries, the Ursulines did for the young women. They spread rapidly until they had communities in all the Catholic countries of Europe, and then houses were established beyond the seas in the Latin-American countries and almost wherever missionaries succeeded in founding churches. Mother Incarnation came to Quebec and is one of the most wonderful women in the early history of the continent. That was before the end of the seventeenth century. At the beginning of the eighteenth (1726) they established a house in New Orleans.

When persecutions came the Ursulines were, as a rule, picked out as an object of special enmity by those who sought to injure the Church. During the French Revolution they were the special butt of the intolerance of the French Republic and gave many martyrs to the cause of religion. When the Kulturkampf came in Germany they were as specifically selected for banishment as the Jesuits, and indeed they have nearly always shared the fate of the Jesuits in times of trial. They have not been without special distinction by persecution even here in America. Their convent was burned down at Charlestown in Massachusetts during the bitter wave of feelings against the religious orders that had been aroused among Protestants in 1835. Their house was the very centre of danger in the " Know Nothing " riots in Philadelphia some twenty years later.

To-day, four centuries after their foundation, the institute is still actively alive and doing its work in every part of the world. When the first sisters elected Angela as their superior they asked that the name of the institute should be the Angelines, after her own name. She was shocked and insisted that, as their superior, she would require them to take the name of Ursulines in honor of St. Ursula. With all this humility, her personality was so pervasive that it still lives in all her houses. There are schools for young women in many of the States of the Union and in many parts of Canada. They are to be found in distant Alaska, teaching within the Arctic Circle. There are Ursulines under the equator, both on this continent, in Brazil and in Africa. This is only another example of the sort of work that the wonderful characters of Columbus' Century accomplished. Whatever they did had a vital force in it that made it live and prove a stimulus and an example to the generations and the centuries down to our own time. Angela of Merici, though almost unknown outside of the Catholic Church, was one of the very great women of the Renaissance. Probably no woman of the time, not even St. Teresa, has had so wide and deep an influence over succeeding generations as the retiring Angela of Merici.

As might well be expected, the movement for feminine education which was felt so strongly in Italy affected France to a scarcely less degree. Indeed, there were much more intimate relations between the nobility of the two countries and among the scholars of the time all over Europe than is usually supposed. As all the scholarly writing was done in Latin, the barrier of language was removed and educational interests readily became very widely diffused. Early in Columbus' Century, Queen Anne of Bretagne is famous for her insistence on education for the women of the French Court. There was a school of Latin at which they all attended, but besides they were expected to know Italian as well as French, and while doing their needlework books were read to them that were calculated to enrich their memories and enhance their literary taste. Queen Anne believed very thoroughly in the fullest of intellectual development for women, and yet insisted also on their duties as managers of their households, and above all as home-makers in the best sense of the term. She knew the dangers of merely intellectual education, and expressions of hers on this subject are often quoted.

The court of Queen Marguerite of Navarre was at least as intellectual as that of Queen Anne, and besides it had the advantage of the deeper knowledge of the classics that had come in the meantime. Marguerite encouraged literature, and herself contributed to it. She had the large tolerance of mind of the educated woman and used it to protect some of those who had fallen under the suspicion, so rife at the time because of the religious troubles in Germany, of favoring or attempting to teach heretical doctrines. As a consequence, she has herself fallen under the suspicion of leanings towards heresy and sympathy with the reformers. This was only, however, to the extent in which that sympathy was shared by Erasmus and others of the time, who saw the abuses that needed correction and hoped that the reform movement would correct them, but who broke with it at once when they realized that revolution and not true reformation was intended. The correspondence between Vittoria Colonna and Marguerite is evidence at once of the intimate relations of the learned women of different countries and also of the sympathy existing between these two scholarly women whose influence over their contemporaries meant so much for the intellectual life of the time. The education given Mary Queen of Scots, which is mentioned later in this chapter, shows how much intellectual development was appreciated for the ruling classes of the time in France.

There are certain expressions from some of these educated women, especially those without much to do, that are wonderful anticipations of some of the things that are heard very commonly now as regards the attitude of educated women toward man's suppression of her in the preceding time. How strangely familiar are these words from Louise Labé, the French poetess of the middle class, one of whose poems of passion will be found in the chapter on French literature. " The hour has now struck," she declared, " when man can no longer shackle the honest liberty which our sex has so long yearned for, when women are to prove how deeply men have hitherto wronged them." That expression is not, however, any more familiar than one of the comments of a masculine contemporary on this occupation of the educated women of the time with political ideas, which is quoted by Miss Sichel in her " Men and Women of the French Renaissance " : " Political women go on chattering as if it were they who did everything."

The women of the time, however, occupied themselves with practical work of many kinds, and not merely with book-learning or political scheming. There is a tradition of a feminine architect of the Tuileries—Mlle. Perron (Porch) being her not inappropriate name. Many Frenchwomen were particularly interested in the diffusion of education among the poorer classes, and we have the story of many school foundations. Mlle. Ste. Beuve, who founded a school and took up her residence opposite to it, became very much interested in the pupils, whom she called her " bees," and whom she encouraged by prizes and distinctions of various kinds. After her death, by the request of the scholars her place was set at table in their midst for the occasions on which she used to come to them, for they felt that her spirit was still with them. Mlle. Saintonge wanted to take up the work of education, but was opposed by her father. She was very much misunderstood, and at one time was stoned by the children on the street. She began with the teaching of five little girls in a garret. Ten years later she was brought in procession by all the people to the great new convent school erected for her, because they realized now how much her work was to mean and how thoroughly unselfish was her devotion to the cause of education and uplift for their children. In the course of the single century after the beginning of our period over three hundred Ursuline schools were opened in France for the education of girls, and the opportunities for education were greatly extended.

Perhaps the greatest surprise for most people in our time is the fine development of feminine education that took place in Spain during this period. English-speaking people have, as a rule, inherited English prejudices with regard to Spain and are likely to be somewhat in the position of asking, Has any good ever come out of Spain? As a matter of fact, the century just after Columbus' Century belongs to Spain for achievement in every department of intellectual and artistic culture. Her literature, her painting, her philosophy, her educators ruled the world of thought and æsthetics. For those who know something of the high worth of Spanish achievement it is no surprise to learn that education reached a high standard of development in the peninsula during Columbus' Century and that, above all, feminine education was magnificently organized, so that the intellectual achievements of the women of this time deserve a high place in the world's history. All this is mainly due to the influence of Isabella of Castile, and has been known for as long as the history of this period has been properly understood.

In his "History of Ferdinand and Isabella" Prescott has told the story of the education and scholarship of Spain with words of high praise. With regard to the feminine education of the time he said in the chapter on "Castilian Literature" (Vol. II):

"In this brilliant exhibition, those of the other sex must not be omitted who contributed by their intellectual endowments to the general illumination of the period. Among them the writers of that day lavish their panegyrics on the Marchioness of Monteagudo, and Doña Maria Pacheco, of the ancient house of Mendoza, sisters of the historian, Don Diego Hurtado, and daughters of the accomplished Count of Tendilla, who, while ambassador at Rome, induced Martyr to visit Spain and who was grandson of the famous Marquis of Santillana, and nephew of the Grand Cardinal. This illustrious family, rendered yet more illustrious by its merits than its birth, is worthy of specification, as affording altogether the most remarkable combination of literary talent in the enlightened court of Castile. The queen's instructor in the Latin language was a lady named Doña Beatriz de Galindo, called from her peculiar attainments *La Latina*. Another lady, Doña Lucia de Medrano, publicly lectured on the Latin classics in the University of Salamanca. And another, Doña Francisca de Lebrija, daughter of the historian of that name, filled the chair of rhetoric with applause at Alcalá. But our limits will not allow a further enumeration of names which should never be permitted to sink into oblivion, were it only for the rare scholarship, peculiarly rare in the female sex, which they displayed in an age comparatively unenlightened. Female education in that day embraced a wider compass of erudition, in reference to the ancient languages, than is common at present; a circumstance attributable, probably, to the poverty of modern literature at that time, and the new and general appetite excited by the revival of classical learning in Italy. I am not aware, however, that it was usual for learned ladies, in any other country than Spain, to take part in the public exercises of the gymnasium, and deliver lectures from the chairs of the universities. This peculiarity, which may be referred in part to the queen's influence, who encouraged the love of study by her own example as well as by personal attendance on the academic examinations, may have been also suggested by a similar usage, already noticed among the Spanish Arabs."*

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* While Prescott's information with regard to the education of Spanish women is very interesting, certain parts of this passage are amusing because they represent mid-nineteenth century ideas with regard to the Renaissance period. Prescott talks of the age as "comparatively unenlightened," but then at that time we had not taken to imitating Renaissance architecture, studying Renaissance literature and art, copying Renaissance book-making and binding, admiring the marvellous workers of the Renaissance in every department and wondering how we could get some of the superabundant intellectual and artistic life of that time into ours. Prescott's complacency is typically American of two generations ago. Since his time we have learned much more of the old-time phases of feminine education as I have reviewed them briefly at the beginning of this chapter. We have learned that every country in Europe had a corresponding feministic movement to that of Spain, with learned ladies in profusion everywhere. His innuendo at the end of his paragraph on the subject that the Spanish development was probably due to similar Arabian customs is of a piece with that marked tendency in his time to find any source for good except Christianity. The Christian nations were supposed to have done nothing worth while till the Reformation. The Middle Ages were still the dark ages and men were supposed to have accomplished nothing. I need scarcely say that we have changed all that and that now the later Middle Ages are looked upon as one of the most productive periods of human history.

The English ladies of the Renaissance are quite as distinguished as their sisters of Italy, France and Spain for their interest in education and the intellectual life. The first one who deserves mention was, though a Queen of England, a Frenchwoman by birth. This was Margaret of Anjou, the wife of the unfortunate Henry VI. If her husband had possessed half the spirit or administrative ability of his wife, the future history of England might have been very different. As it was, the failure of Margaret to secure the throne either for her husband or her children, left it to the Tudors with all that their tyranny meant for England and with the unfortunate religious disturbances which came as a consequence of the headstrong ways of the passionate descendants of the Welsh knight. Margaret founded Queen's College, Cambridge, just about the beginning of Columbus' Century and gave that example of enlightened patronage of learning which was to bear ample fruit among the Englishwomen of the Renaissance during the succeeding centuries. One of her successors, Queen Elizabeth Woodville, who refounded Queen's College when it was threatened with disaster because of the impairment of its endowment and efficiency by the Wars of the Roses, is another of the enlightened patronesses of learning at this time.

About the middle of Columbus' Century, Margaret Beaufort founded the Divinity Lectureships of Oxford and Cambridge, since known as the Margaret Lectureships. She refounded Christ's College and St. John's College in Cambridge a few years later. She also founded a free school at Wymbourn in Dorsetshire. Her own intellectual abilities and education are attested by her translation of the "Imitation of Christ" at this time. Her wise counsellor in all of her efforts for the benefit of education was the martyred Bishop Fisher, who has left us a panegyric of her which enables us to appreciate her place as one of the distinguished learned women of the Renaissance. Like nearly all of these women, she was interested not only in books, but also in artistic work of many kinds and believed that an educated woman's first duty must be the decoration of the home. She excelled in ornamental needlework at a time when a great many of the noble ladies were accustomed to do this sort of art work and when many beautiful examples of it were produced. Another member of the nobility who became well known for her intellectual attainments was Mary, Countess of Arundel, the compiler of " Certain Ingenious Sentences," a collection of proverbial expressions that had a wide popularity at this time.

Toward the end of our Century came the women on whom the Renaissance had a more direct influence. A great many of the daughters of the nobility were given the opportunity for the highest education, and many of them took it very brilliantly. The names of the distinguished women scholars, or at least of women who were noted for their attainments, are numerous and include many even of royal blood. Evidently feminine education had become the fashion, and many others must have been interested in it since it affected the great ladies so deeply. It would be quite impossible to think that what occupied so much the attention of the daughters of the highest nobility would not also prove a great attraction for many others. Perhaps the best known of the " blue stockings " of the time is Lady Jane Grey, of whose attainments we have so sympathetic an account from Roger Ascham. He says that she was deeply read in philosophy, and that she knew Latin, Greek, Hebrew, Chaldaic, Arabic and French. We are told that she cared much more to read her Greek authors than to go to routs and parties, or even to go hunting, which was the most fashionable amusement of the time. Besides, she knew music well and was particularly skilled in needlework. Indeed, there is none of these distinguished scholarly women of England of whose devotion to needlework we do not hear.

Mary Queen of Scots comes at the very end of the century, and French rather than English or Scotch influence was at work in her education, but the roll of her distinguished teachers shows how seriously the question of proper education for the future queen was taken at this period. George Buchanan was her professor of Latin, she studied rhetoric with Fauchet, history with Pasquier and poetry with Ronsard. We have at least one very interesting Latin poem that has been attributed to her, and if the attribution be correct it is excellent evidence for her scholarliness.*

Her rival, Elizabeth, was only seventeen years of age when the century closed, but this was also the age of Lady Jane Grey, when she was put to death, yet we hear much of her attainments and Elizabeth was one of her great scholarly rivals. Like Lady Jane, Elizabeth is said to have known five languages and to have studied music, philosophy, rhetoric and history to such good purpose that her accomplishments were much more than mediocre or conventional. With these examples before us there can be no doubt at all of the fashionableness of the higher education for women, and whatever is fashionable attracts the attention of all classes of women.

Probably the best example of the provision of opportunities for even the highest education for women is to be found in Sir Thomas More's household. He thought that his girls should share equally with his boys in their opportunities for the new learning. His daughter Margaret is quite famous for her attainments, Erasmus and others having praised her so highly. She had a thorough knowledge of Greek and Latin and much more than a passing or superficial acquaintance with philosophy, astronomy, physics, arithmetic, logic, rhetoric and music. The affection of her father for her, his encouragement of her studies and the intimate relations between them have made her illustrious not only in the history of feminine education, but in world history. While near the end of his life More was Lord Chancellor, his family was not of the higher nobility, and he himself, as practically a self-made man, belonged only to the professional classes of the time. It seems not far-fetched, then, to conclude that a good many of the daughters of lawyers and physicians at this time must have had abundant opportunities afforded them for as much education as they cared to have, though of course they would not have the advantages of More's children, which were due, however, not to his political importance, but to his friendship for the great scholars of the time. While Margaret is so well known it must not be forgotten, though we hear so much less of them, that More's two other daughters were also very well educated. Leland, the antiquary, wrote of "the three learned nymphs, great More's fair progeny." If so little is known of More's other daughters, it is probable that there were not a few others who had similar advantages to theirs, though no record of it is in history.

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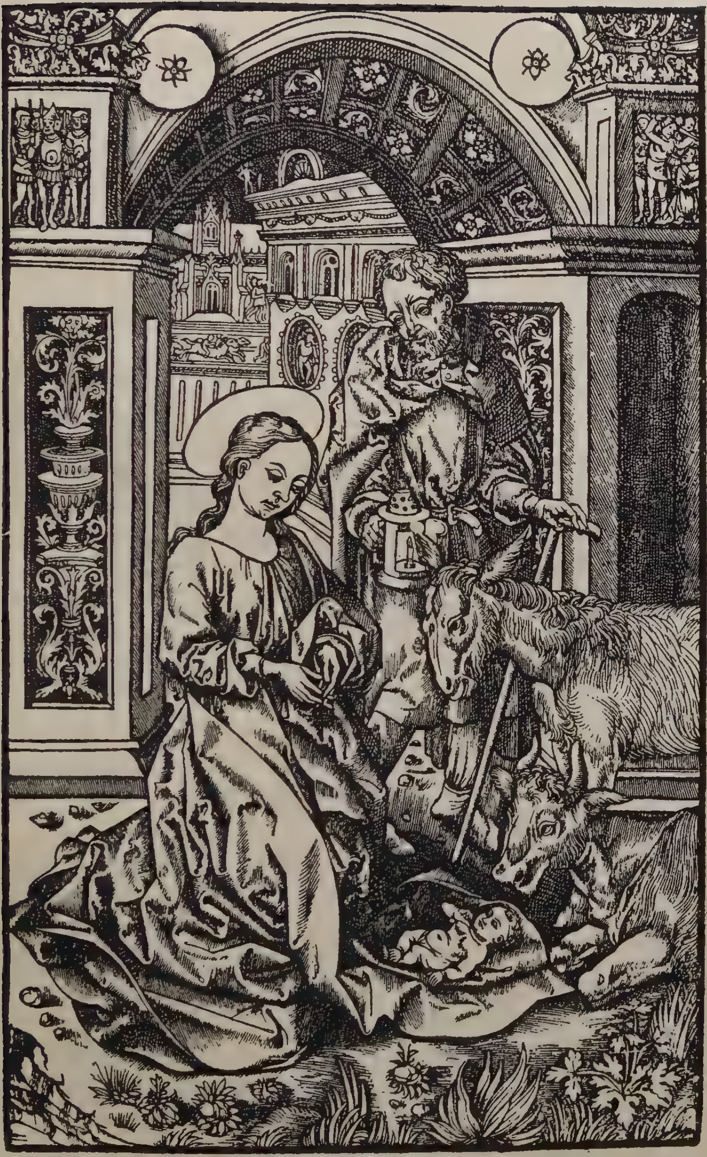
* "O Domine Deus!
Speravi in te;
O care mi Iesu!
Nunc libera me:
In dura catena,
In misera poena
Desidero te;
Languendo, gemendo,
Et genuflectendo
Adoro, imploro,
Ut liberes me!"

Among the many demonstrations that this intellectual movement among women was not confined to Italy, nor even to the Southern nations, is the career of Charitas Pirkheimer, the Abbess of the Convent of the Poor Clares in Nuremberg. She became famous as an educated woman with whom many of the distinguished scholars of the Renaissance were proud to be associated. Her brother Wilibald, who was her guide and teacher, appreciated her so much that he dedicated several of his books to her, and in the preface of one, "On the Delayed Vengeance of the Deity," a Latin translation of Plutarch's treatise, he praises her education and her successful devotion to study. More disturbed than astonished, she protested that she was only the friend of scholars, but not herself a scholar. When Conrad Celtes published his collection of the works of Roswitha, he presented one of the first copies of the book to Charity Pirkheimer, and in a eulogy written on that occasion lauds her as one of the glorious ornaments of the German Fatherland. He enclosed a volume of his poems at the same time, and the good abbess very candidly asked him to devote himself rather to the study of the sacred books and the contemplation of high things than to the study of the sensual and low in the ancients. She was a great friend of Johann Butzbach and of Albrecht Dürer. Christopher Scheurl dedicated to her his book on "The Uses of the Mass." In his article in the Catholic Encyclopedia, Klemens Loffler says of her: "But all the praise she received excited no pride in Charitas; she remained simple, affable, modest and independent, uniting in perfect harmony high education and deep piety.



DÜRER NATIVITY

It was thus she resisted the severe temptations which hung over the last ten years of her life."

Some expressions of the women of the Renaissance are famous for their wit and aptness. The famous reply of one of them, the Princess Christina of Denmark, may be taken as evidence that witty power of expression was not confined to the women of the Southern countries. Her picture by Holbein, "The Lady with the Cloak," is so well known that we seem to be able to recreate her personality rather completely. She was approached by the ambassadors of Henry VIII after the death of Jane Seymour with a proposal of marriage. Indeed, Holbein's picture was made for the purpose of giving the uxorious Henry an idea of the charms of the young woman. She was only eighteen at the time, but she was already the widow of Francesco Sforza, and she is said to have replied she would be quite willing to be the Queen of England if she had two heads and could be sure of retaining one of them. As she had only one, however, she could not take any risks in the matter. Julia Cartwright's life of her, recently published, shows what a clever woman of the Renaissance she was. Her reply is quite worthy of the Italian ladies of the time, some of whom were noted for their rather biting wit. One of the nobility in Italy having said that man's duty was to fight and not to take part in social ceremonies, one of the Gonzagas said: "It is too bad, then, that he does not hang himself up in a closet with his armor whenever he is not actually engaged in warfare."

It is often assumed that intellectual development, and especially the higher education, has a tendency to take women away from that devout attitude of mind which makes them religious. There are many examples in the Renaissance time, however, which serve to disprove this idea. The smaller and more superficial minds may be thus affected. It is not true for the larger, more profound intelligence. St. Teresa, in her directions to the Mothers of houses as regards the reception of postulants, said: "Where there is ignorance and piety do not forget that the piety may evaporate and the ignorance remain." Many of the best-known intellectual ladies of the Renaissance time were deeply pious. Vittoria Colonna is a

VIVARINI, ST. CLARE

typical example, so in spite of the apparent testimony of her famous book to the contrary is Marguerite of Navarre. Lucretia Tornabuoni, the mother of Lorenzo the Magnificent, wrote some charming religious verse. The difference of opinion between Clarice dei Orsini, the wife of Lorenzo, and Politian as regards the teaching of religion to her children, in which she came off victor, is well known. Above all, these women were all close to the religious women of the time. Many of them spent some days every year at least, often some weeks, in favorite convents. They took their rest by following the daily exercises of the monastic life in various convents. Vittoria Colonna was noted for this, and during her widowhood spent very much time in this way. Nothing that I know contradicts so completely the slanders as to convent life at this time as these intimate relations with the religious.

It is noteworthy that in our country and time, just in proportion as education for women is widely diffused, the practice of more intimate relations with convents grows more common. Many women of the world, teachers, writers, take a few days each year now for a retreat in a convent. Not a few of those who enter religion are very well educated. A great many of those who belong to the teaching orders are thoroughly trained, and often fine experts in their specialties. In the Renaissance period the daughters of the great noble houses sometimes entered religious orders. Not infrequently they met with opposition, and especially parental and family influence was exerted to divert them from their purpose. Paola and Cecilia Gonzaga both became religious. There was considerable family opposition, especially on her father's part, against Cecilia's accomplishment of her purpose, but her great teacher, Vittorino da Feltre, one of whose favorite pupils Cecilia was, took her side. When her father insisted on finding a husband for her, Vittorino urged that women should be allowed to choose their careers for themselves, and above all, if they felt the call to the spiritual and intellectual life, should be given the opportunity for the self-development that the peace and ordered life of the cloister afforded.

Burckhardt has summed up the qualities of the women of the Renaissance in a single sentence, that is worth while recalling. So much is said about the influence of the study of the classics in producing pagan ideas and looseness of morals and relaxation of old ethical standards during the Remissance that it is well to recall what this deep student of the time thought. His words will be found to corroborate and sum up the character that we have been trying to paint of the women of the Renaissance in these pages:

"Their distinction consisted in the fact that their beauty, disposition, education, virtue and piety combined to make them harmonious human beings."

CHAPTER X

PHYSICAL SCIENCE OF THE CENTURY

While it is universally conceded that the Renaissance was a supremely great period in all the arts and literature, in education and scholarship, and that its geographical discoveries made it noteworthy from another standpoint, there is a very prevalent impression that it was distinctly lacking in scientific development and that indeed the proper attitude of mind for successful scientific investigation was a much later evolution. Most of the discoveries of even basic notions in science are almost universally thought to have been reserved for our time or at least for generations much nearer to us than Columbus' Century.

Nothing could well be less consonant with the actual history of science than any such impression. At many times before ours man has made great scientific progress. The greatest mystery of human history is that often after great discoveries were made they were somehow lost sight of. Over and over again men forget their previous knowledge and have to begin once more. There was one of these magnificent developments of scientific thought in every department during Columbus' Century and discoveries were made and conclusions reached which revolutionized other modes of scientific thinking just as much as Columbus' discovery of America revolutionized geography, or the work of Raphael or Michelangelo and Leonardo revolutionized the artistic thought of the world.

When we recall that it was at this time that Copernicus set forth the theory which has probably more influenced human thinking than any other and that this discovery developed directly from the mathematics of the time and while Vesalius revolutionized anatomy, the discovery of the circulation of the blood began a similar revolution in physiology and the foundations of botany and of modern chemistry in their relations to medicine were laid, some idea of the greatness of the scientific advance of this period will be realized. Mathematics, particularly, developed marvellously and it is always when new horizons are opening out in mathematics that the exact sciences are sure to have a period of wonderful progress. Beautiful hospitals were erected and whenever there are good hospitals, surgery makes progress and that care for the patient which constitutes the essential part of medicine at all times, receives careful attention.

Above all the men of the Renaissance took it on themselves to edit and translate and publish the ancient classics of science and make them available for the study of their own and subsequent generations. The debt which the modern world owes to the Renaissance in this matter is only coming to be properly realized as a consequence of our own development of scholarship in this generation. Only the profound scholar is likely to appreciate properly how much we are indebted to the patient, time-taking work of this period in making books available. Not only the ancient classics but also the works of the Middle Ages on scientific subjects were all published. The early Christian scholars, the Arabians, and above all, the great teachers of the later Middle Ages were edited and printed as an enduring heritage for mankind.

The index of the feeling of the time toward physical science as well as the interest of the scholars of the period in nearly every phase of it is illustrated by the life of Cardinal Nicholas of Cusa, who is usually known as Cusanus. He was a distinguished German churchman who was made Bishop of Brixen and afterwards Cardinal and who had the confidence of the Popes to such a degree that he was sent out as Legate for the correction of abuses in Germany. He was particularly interested in mathematics and the great German historian of mathematics, Cantor, devotes a score of pages to the advances in mathematics which we owe to Cusanus. According to tradition during his journeys over the rough roads in the rude carriage of the time, he studied the curve described through the air by a fly as it was carried round the wheel after alighting on the top of it. He recognized this as a particular kind of curve which we know now as the cycloid and he studied many of its peculiarities and suggested its mathematical import.

He was particularly interested in astronomy and declared that the earth was round, was not the centre of the universe and that it could not be absolutely at rest. As he put it in Latin: *terra igitur, quæ centrum esse nequit, motu omni carere non potest.* He described very clearly how the earth moved around its own axis, and then he added what cannot but seem a surprising declaration for those who in our time think such an idea of much later origin, that he considered that the earth itself cannot be fixed, but moves as do the other stars in the heavens, *Consideravi quod terra ista non potest esse fixa sed movetur ut aliæ stellæ.* More surprising still, he even seems to have reached by anticipation some idea of the constitution of the sun. He said: " To a spectator on the surface of the sun the splendor which appears to us would be invisible since it contains as it were an earth for its central mass with a circumferential envelope of light and heat and between the two an atmosphere of water and clouds and of ambient air."

These expressions occur mainly in a book "*De Docta Ignorantia,*" in which the Cardinal points out how many things which even educated people think they know are quite wrong. His other books are on mathematics, though there is a little treatise on the correction of the calendar which shows how thoroughly the men of the time recognized the error that had crept into the year and how capable they were of making the correction. In a book of his on " Static Experiments " he has a very original discussion of laboratory methods for the study of disease which is eminently scientific, and which is described in the chapter on Medicine.

The life of George von Peuerbach, also Puerbach and Purbachius, the Austrian astronomer, one of Cardinal Nicholas' protégés who lived to be scarcely forty and whose greatest work was done just at the beginning of Columbus' Century, is an excellent index of the scientific spirit of the time. About 1440, when he was not yet twenty years of age, he received the degree of Master of Philosophy and of the Liberal Arts with the highest honors at the University of Vienna. After this he seemed to have spent some time at postgraduate work in Vienna, especially in mathematics under Johann von Gmünden. Just about the beginning of Columbus' Century he went to

Italy. Cardinal Nicholas of Cusa became interested in him and secured him a lectureship on Astronomy at the University of Ferrara. During the next few years he refused offers of professorships, at Bologna and Padua, because he wanted to go back to Vienna to teach in his alma mater. There, with the true Renaissance spirit of non-specialism, he lectured on philology and classical literature, giving special postgraduate courses in mathematics and astronomy. It was at this time that Johann Müller, Regiomontanus, as he is known, came under his tutelage. Purbach deserves the name that has been given him of the father of mathematical astronomy in modern times.

He introduced the decimal system to replace the cumbersome duodecimal method of calculation, which up to his time had been used in mathematical astronomy. He took up the translation of Ptolemy's "Almagest," replaced chords by sines and calculated tables of sines for every minute of arc for a radius of 600,000 units. This wonderful work of simplification naturally attracted wide attention. Cardinal Bessarion was brought in touch with him during a visit to Vienna and was impressed with his genius as an observer and a teacher. He suggested that the work on Ptolemy should not be done on the faulty Latin translation which was the only one available in Vienna at the moment, but on some of the Greek manuscripts of the great Alexandrian astronomer. He offered to secure them and also to provide for Purbach's support during the stay in Rome necessary for the study. The invitation was accepted on condition that his pupil Regiomontanus should go with him. Unfortunately, however, Purbach died before his journey to Rome. His works were very popular in his own time and his commentary on the "Almagest of Ptolemy" as completed by Regiomontanus became one of the standard text-books of the time. Altogether there are some twenty of his works extant and his "New Theory of the Planets" remained a favorite book of reference for astronomers even long after the publication of Copernicus. His industry must have been enormous but was after all not different from that of many of his contemporaries.

Astronomy was to be the great stimulating physical science of the early part of Columbus' Century and Purbach's successor in the chain of scientific genius at this time was his pupil Johann Müller, or as he has come to be known from the Latinization of the name of the place of his birth, Königsberg (in Franconia, not far from Munich), Regiomontanus. As we have said, young Müller made his studies with Purbach at Vienna, became very much interested in astronomy and mathematics, at his master's suggestion accompanied Cardinal Bessarion to Italy and under his patronage took up the work of providing an abridgment of Ptolemy's great work, the "Almagest," in a Latin translation for those who might be deterred from the Greek.

Cardinal Bessarion became very much interested in him and gave him a chance to study in Italy. Müller chose Padua and spent nearly ten years there. Whenever anybody in almost any country in Europe wanted to secure opportunities for study beyond those afforded by his native land at this time he went down to Padua. Linacre, Vesalius, John Caius went there for medicine, Copernicus, a little later than Regiomontanus, for mathematics and astronomy and it was the ardently desired goal of many a student's wishes. Müller spent nearly ten years in Italy, most of it at Padua and at the age of about thirty-five returned to Germany to take up his life work. He settled down in Nuremberg, where in connection with Bernard Walther he secured the erection of an observatory. Nuremberg, because of its fine work in the metals, was the best place to obtain mechanical contrivances of all kinds, and many of these were used for the first time for scientific purposes at this observatory. It became quite a show place for visitors and while Nuremberg was developing the literary and artistic circles in which the Pirkheimers, Albrecht Dürer and the Vischers and Adam Kraft shone conspicuously, scientific interest in the city was at a similar high level.

Müller made a series of observations of great value in the astronomy of the time and substituted Venus for the moon as a connecting link between observations of the sun, the stars and the earth. He recognized the influence of refraction in altering the apparent places of the stars and he introduced the use of the tangent in mathematics. His most important work for the time, however, was the publication of a series of astronomical leaflets, "*Ephemerides Astronomicæ*," in which his observations were published and also a series of calendars for popular information. These announced the eclipses, solar and lunar, for years before their recurrence and gave a high standing to astronomy as a science. Some of these leaflets even reached Spain and Portugal and encouraged Spanish and Portuguese navigators with the thought that they could depend on observations of the stars for their guidance at sea. In a way, then, Regiomontanus' work prepared the path along which Columbus' discovery was made.

Regiomontanus' work attracted so much attention that he was invited to Rome to become the Papal Astronomer and to take up the practical work of correcting the Calendar. Unfortunately he died not long after his arrival in Rome, though not before he had been chosen as Bishop of Regensberg (Ratisbon) as a tribute to his scholarship and his piety. He thus became a successor of Albertus Magnus (in the bishopric), who had been in his time one of the profoundest of scholars and greatest of scientists. The tradition of appreciation of scholarship and original research had evidently been maintained for the three centuries that separate the two bishop scientists.

A distinguished scientific student born at Nuremberg the same year as Regiomontanus was Martin Behem or Behaim, the well-known navigator and cartographer, who on his return to Nuremberg in 1493 made the famous terrestrial globe which was meant to illustrate for his townsmen the present state of geography as the Spaniards and Portuguese had been remaking it. Behem's work is a striking testimony to the excellence of geographic knowledge at this time, and only for the preservation of this globe we could scarcely have believed in the modern time how correct were the notions of the scholars of the period with regard to the older continent at least.

One of the great physical scientists of this time is Toscanelli, the physician, mathematician, astronomer and cosmographer, over whose connection with Columbus such a controversy has raged in recent years. He and Cardinal Cusanus were fellow students at the University of Padua, where Toscanelli's course consisted of mathematics, philosophy and medicine. He settled down as a practising physician in Florence and took up scientific studies of many kinds which brought him into connection not only with the students of science, but with the scholars and artists of the time. Brunelleschi and he were intimate friends, but he was well known outside of Italy, and Regiomontanus often consulted him. His services to astronomy consist in the painstaking and exact observations on the orbit of the comets of 1433, 1449-50 and especially of Halley's comet on its appearance in 1456 and of the comets of May, 1457, June, July and August of the same year. These show a most accurate power of astronomical observation and profound mathematical knowledge for that time. His famous chart indicated just how a navigator might reach the coast of India by sailing westward, and Columbus is said to have carried a copy of this chart with him on his first voyage. Whether this is true or not, there is no doubt of Toscanelli's place in the history of science because of original work in astronomy, geodesy and geography.

The most important protagonist of physical science during Columbus' Century, however, was undoubtedly Copernicus. Columbus gave the men of his time a new world, but Copernicus gave them a new creation. When early in the sixteenth century he published a preliminary sketch of his theory, one of his ecclesiastical friends remarked to him that he was giving his generation a new universe. There has probably never been a theory advanced which has changed men's modes of thinking with regard to the world they live in and their relation to it as the Copernican hypothesis has done, though it must not be forgotten that there are some as yet insuperable difficulties which keep it still in the class of scientific hypotheses.

The earth had up to this time been universally thought of as the centre of the universe, much more important than any of the other bodies, sun, moon or stars, and all the others were thought to move around it. Their apparent movement was due to the rotation of the earth, which was quite unrecognized. The immense distances of space were entirely undreamt of. In the new order of thinking the earth became a minor planet of small size in our solar system which was of inconspicuous magnitude when compared to the totality of the other bodies of the universe. The acceptance of the new theory sank man in his own estimation very considerably. The change of point of view of the meaning of the universe necessitated by the Copernican theory was ever so much greater than that demanded by evolution in our time.

It took two centuries for men to adjust their thinking to these new ideas. Francis Bacon, a full century after Copernicus' time, declared emphatically that the Copernican theory did not explain the known facts of astronomy as well as the Ptolemaic theory. In Bacon's time Galileo was the subject of persecution and the reason for the persecution was that he was advancing a doctrine which no other great astronomer of his time accepted, and advancing it for reasons which have not held in the after-time. The Copernican theory came eventually to be accepted for quite different reasons from those advanced by Galileo.

How Copernicus succeeded in coming to this magnificent generalization is indeed hard to understand. It is easier to get some notion of it, however, when his achievement is taken in connection with what was being done all around him at this time. Living in a century when great men were accomplishing triumphs in painting, sculpture, architecture that have been the wonder of the world ever since, and when geography was being revolutionized, and nearly every science awakened, it is not surprising that he should have reached a height of mathematical and astronomical expression beyond any that men had ever conceived before and that he should have surpassed many of the generations to come after him, by the clearness of his intuition of the astronomical mystery of the universe.

Copernicus had not made many observations nor were such observations as had been made by him worked out with that painstaking accuracy which might be thought necessary to reach a great new conception of the universe. He had the genius to see from even the few and imperfect data that he had at hand what the true explanation of the diverse phenomena of the heavens was. He had no demonstrations to advance. He argued merely from analogy. Even Galileo, a century later, admitted to Cardinal Bellarmine that he had no strict demonstration of his views to offer, but that "the system seems to be true." While the feeling of many scientists in the modern time is that great discoveries come from patient accumulation of accurate observations in large numbers, the history of science shows that almost invariably the epochal steps in progress have come from men who were comparatively young as a rule and who were not overloaded with the information of their time. The great artists of the Renaissance could probably have given no better reasons for their artistic conceptions than Copernicus for his stroke of genius, but they were all working at a time when somehow men were capable as they never have been since of these far-reaching intellectual achievements.

Copernicus was a Pole who, like other students of his time, gladly welcomed the opportunity to go down to Italy for postgraduate work, studied with Novara at Padua mathematics and astronomy and was quite willing to add the study of medicine, because by so doing he could secure an extension of the length of time he would be allowed to remain in Italy. He then returned to be a canon of the Cathedral of Frauenberg, and spent forty years in quiet patient observation and in the practice of his medical profession not for money, but for the benefit of the poor and such friends of the chapter of the Cathedral as he was under obligations to because of the years they had supported him in Italy. He probably reached his great astronomical theory when he was about thirty. He did not publish the preliminary sketch of it for twenty-five years. He did not publish his great book until just before his death, keeping it by him, making changes in it and while thoroughly convinced of its importance, quite sure that, owing to its lack of definite demonstration, it would not be generally accepted.

Like so many of these geniuses of the Renaissance he was a simple kindly man who had many good friends among those around him and who had one of the very happy lives accorded to those who, having some great thought and great work to occupy themselves with, have daily duties that afford them diversion and bring them into contact with friends in many ordinary relations in life. His humility of heart and simplicity of character, as well as his deep religious faith, can be very well appreciated from the prayer which at his own request was the only inscription upon his tombstone: "I ask not the grace accorded to Paul, not that given to Peter; give me only the favor Thou didst show to the thief on the Cross."

His attitude toward the reform movement, twenty years of which he lived through in Germany, is interesting. He was an intimate friend of Bishop Maurice Ferber of Ermland, who kept his see loyal to Rome at an epoch when the secularization of the Teutonic Order and the falling away of many bishops all around him make his position and that of his diocese noteworthy in the history of that place and time. Copernicus continued loyal to the old Church and in 1541 his great book *"De Revolutionibus Orbium Celestium"* was dedicated to Pope Paul III, who accepted the dedication and until the Galileo matter brought Copernicanism prominently into question there was never any thought of Copernicus' book as containing matters opposed to faith. It was then placed on the *Index,* but only until some minor passages should be corrected which set forth the new theory as if it were an astronomical doctrine founded on facts and demonstrations and not a hypothesis still to be discussed by scientists.

The scientific spirit of this century is often scouted because in spite of their scientific knowledge many of the astronomers and mathematicians of this time as well as, of course, other educated men following their example, could not quite rid themselves of the idea that the stars were powerful influences over man's life and health. The history of this idea, however, minimizes the objection. All down the centuries men like Roger Bacon, Albertus Magnus, Nicholas of Cusa, Marsilio Ficino and Pico della Mirandola insisted that there could be nothing in what we now call astrology. Men parted with the older ideas very slowly, however. Almost a hundred years after Columbus' Century even Galileo made horoscopes and seems to have thoroughly believed in them, though some of his prophecies were sadly mistaken. Kepler drew up horoscopes, confessing that he had not much confidence in them but that they were paid for much better than other mathematical work and he sadly needed the money. Lord Bacon could not quite persuade himself that there was nothing in astrology. As late as after the middle of the eighteenth century Mesmer's thesis for graduation in medicine at the University of Vienna, which at that time had one of the best medical schools of Europe, was on the influence of the stars on human constitutions. It was accepted by the faculty and he got his degree. Even in our time, though now the educated contemn, the mass of the people still have not entirely rejected astrology. The men of Columbus' Century can scarcely be thought less of for having accepted it, though many of the scientists of the time did not.

The counterpart to the great scientific genius that Copernicus was, the generalizer who discloses a new horizon, was to be found in his contemporary, Leonardo da Vinci, who was an inventor, a practical genius applying discoveries to everyday life. He solved most of the mechanical problems, invented locks for canals, the wheelbarrow and special methods of excavation, a machine for making files by machinery, run by a weight, a machine for sawing marble blocks instead of separating them by natural cleavage, the model of those still employed at Carrara, as well as machines for planing iron, for making vices, saws and planes, for spinning, for shearing the nap of cloth, as well as an artist's sketching stool, a color grinder, a spring to keep doors shut, a roasting jack, a hood for chimneys, movable derricks quite similar to those in use among us to-day, with contrivances for setting up marble columns on their bases, one of which in principle was used to set up Cleopatra's Needle on the Embankment in London in our time. A favorite field of invention was that of all sorts of apparatus relating to war, military engines, devices for pushing scaling ladders away from walls and many others. He was probably the greatest inventive genius in the world's history. He had an eminently practical mind. He devoted himself to the problem of flying, studied the wings of birds and produced a series of mechanical devices, tending toward the solution of that problem.

Taine said of him: "Leonardo da Vinci is the inventor by anticipation of all the modern ideas and of all the modern curiosities, a universal and refined genius, a solitary and inappeasable investigator, pushing his divinations beyond his century so as at some times to reach ours." There was scarcely anything that he touched that he did not illuminate wonderfully by his genius. In studying the muscles of animals he invented a dynamometer, he improved spectacles and studied the laws of light, invented the camera obscura and in his steam experiments anticipated Watt. A very curious feature of his work is his series of experiments with the steam gun, with which he was sure that great destruction might be worked.

A very interesting invention of a scientific instrument of some precision by Leonardo was what may be called a weather gauge. This was made of a copper ring with a small rod of wood, which acted as a balance. On it were two little balls, one covered with wax and the other with material that absorbed moisture readily. When the air was saturated with moisture this ball grew heavy and inclined the beam till it touched one of the divisions marked on the copper ring set behind it. The degree of moisture could thus be seen and the weather, or at least changes in it, could be predicted. We have a whole series of such arrangements mainly in the shape of toys in the modern time. The hygroscopic qualities of cord or the tendency of certain colors to change their tints when more moisture is present are used to indicate approaching changes in the weather. Leonardo seems to have been the first to make use of this practically and he deserves the credit of priority in the invention.

His studies in optics might almost naturally be expected from a painter so much occupied with color and whose intense curiosity prompted him to know not merely the use of things but the causes of and the reasons for them. He evolved much of the science of color vision, suggested the principles of optics that came to be known only much later, analyzed and explained the construction of the eye, invented the camera obscura in imitation of it and gave us a theory of color vision which is as good as any other that we have down to the present day. These optical studies alone might well be considered as enough to occupy an ordinary lifetime, but they seem to have been only the results of a series of interludes of the nature of recreation for Leonardo. He made his notes on the subject, filed them away with others, made no attempt to print his conclusions, probably found very few with whom he could discuss the subject, but he had satisfied himself. That was what he wanted.

After knowing such facts as this we are not surprised to learn of his anticipating by some sort of divination the laws of gravitation, the molecular composition of water, the motion of waves, the undulatory theory of light and heat, the earth's rotation and rotundity before Columbus' time and many other surprising things. One finds in his diary that he was planning the construction of a harbor and studying the music of the waves on the beach at the same time.

Poggendorff, in his great Biographical Dictionary of prominent men of science, quotes Libri's "History of Mathematics in Italy" as authority for the declaration that Leonardo discovered capillarity and diffraction, made use of the signs + and —, knew the camera obscura (without a lens), made observations on resistance, on density, on the weight of the air, on dust figures, on vibrating surfaces and on friction and its effects.

All sorts of machines came from Leonardo's hands. He had a positive genius for practical invention that has probably never been equalled, surely not surpassed, even down to our own day. His inventive faculty worked itself out, in machines of such variety as have never come from the brain of a single individual before. Nor were these merely primitive mechanical devices that we would surely despise now. On the contrary, nearly all of them have endured in principle at least and some of them almost as they came from him.

Leonardo also did distinguished work in the biological sciences, so that Duval, Professor of Anatomy at the University of Paris and himself well known both for his researches in biology and his knowledge of the history of science, entitles an article with regard to him in the French *Revue Scientifique* (Dec. 7, 1889), "A Biologist of the Fifteenth Century." His biological discoveries are discussed in the chapter on the Biological Sciences.

Sometimes it is asserted by those who are so little familiar with the history of science that they venture on such assertions rather easily, that the true scientific spirit had not yet awakened and that while men were making many observations and acquiring new information they had not as yet the proper scientific attitude of mind to make really great discoveries. It is rather amusing to be told that of a century when Copernicus and Vesalius and so many other distinguished modern scientists were alive. Some writers suggest that the true rising of the modern spirit of scientific inquiry did not come until Francis Bacon's time. Francis Bacon is one of the idols of the marketplace, but surely no serious student of history accords him the place in science that our English forbears gave him when they were insular enough to know very little about continental work, and above all about Italian workers.

Francis Bacon, of course, had been long anticipated in all that concerns the inductive method in science by his much greater namesake Roger Bacon. In Columbus' Century however, a hundred years before Bacon's time, Bernardino Telesio, the Italian philosopher, stated fully the inductive method and recognized all its possibilities. In *Science* for December 19, 1913, Professor Carmichael said of him:

" He abandoned completely the purely intellectual sphere of the ancient Greeks and other thinkers prior to his time and proposed an inquiry into the data given by the senses. He held that from these data all true knowledge really comes. The work of Telesio, therefore, marks the fundamental revolution in scientific thought by which we pass over from the ancient to the modern methods. He was successful in showing that from Aristotle the appeal lay to nature, and he made possible the day when men would no longer treat the *ipse dixit* of the Stagirite philosopher as the final authority in matters of science."

The tendency of this century to make scientific principles of value for practical purposes is well illustrated by the references to the sympathetic telegraph which began to be much talked of at this time. According to the story as told, friends at a distance might be able to communicate with each other by having two dials around which the letters of the alphabet were arranged with a magnetic needle swinging free as the indicator. When the needle on one of the dials was moved to a letter, the other by magnetic attraction was supposed to turn to the same letter. This ingenious conceit has been attributed to Cardinal Bembo, one of the great scholars of the Renaissance, who was private secretary to Pope Leo X. His friend

Porta, the versatile philosopher, made it widely known by the vivid description which he gave of it in his celebrated work on "Natural Magic," published just after the close of Columbus' Century.

A very important development in science came in the application of chemistry to medicine, both as regards physiology and pathology. Basil Valentine at the beginning of Columbus' Century led the way and Paracelsus did much to indicate what the advantage of the application of chemistry to medicine would be. Paracelsus compared the processes in the human body with chemical phenomena and declared that alterations in the chemical conditions of organs were the causes of disease. He set himself up in opposition to the humoral theory of the ancients and denied that the heart was the seat of heat manufacture in the body, for every portion of the system had, he asserted, its source of heat. It was through Paracelsus that chemistry was added to the medical curriculum and George Korn in his chapter on Medical Chemistry in Puschmann's "Handbook" attributes the foundation of certain professorships for chemistry at the universities of this time to Paracelsus' influence. Andreas Libavius did much to advance chemical science in various directions by his study and preparation of sulphuric acid and his recognition of the identity of the substance made from sulphur and saltpeter with that obtained from vitriol and alum. Studies of this kind brought a broad realization of the possibilities of chemistry.

The spirit of the period as regards science and the development of the faculty of observation at this time is very well illustrated by Columbus' own observations on the declination of the magnetic needle during his first voyage across the ocean. Brother Potamian has told the story in "Makers of Electricity" (Fordham University Press, New York, 1909), page 22:

"It is one of the gems in the crown of Columbus, that he observed, measured and recorded this strange behavior of the magnetic needle in his narrative of the voyage. True, he did not notice it until he was far out on the trackless ocean. A week had elapsed since he left the lordly Teneriffe, and a few days since the mountainous outline of Gomera had disappeared from sight. The memorable night was that of September 13th, 1492. There was no mistaking it; the needle of the Santa Maria pointed a little west of north instead of due north. Some days later on September 17th, the pilots, having taken the sun's amplitude, reported that the variation had reached a whole point of the compass, the alarming amount of 11 degrees.

"The surprise and anxiety which Columbus manifested on those occasions may be taken as indications that the phenomenon was new to him. As a matter of fact, however, his needles were not true even at the outset of the voyage from the port of Palos, where, though no one was aware of it, they pointed about 3° east of north. This angle diminished from day to day as the Admiral kept the prow of his caravel directed to the West, until it vanished altogether, after which the needles veered to the West, and kept moving westward for a time as the flagship proceeded on her voyage.

"Columbus thus determined a place on the Atlantic in which the magnetic meridian coincided with the geographical and in which the needle stood true to the pole. Six years later, in 1498, Sebastian Cabot found another place on the same ocean, a little further north, in which the compass lay exactly in the north-and-south line. These two observations, one by Columbus and the other by Cabot, sufficed to determine the position of the agonic line, or line of no variation, for that locality and epoch.

"The *Columbian* line acquired at once considerable importance in the geographical and the political world, because of the proposal that was made to discard the Island of Ferro and take it for the prime meridian from which longitude would be reckoned east and west, and also because it was selected by Pope Alexander VI to serve as a line of reference in settling the rival claims of the kingdoms of Portugal and Castile with regard to their respective discoveries. It was decided that all recently discovered lands lying to the east of that line should belong to Portugal; and those of the west to Castile."

The first observation of magnetic declination on land appears to have been made about the year 1510 by George Hartmann, Vicar of the Church of St. Sebald, Nuremberg, who found it to be 6° East in Rome, where he was living at the time. He observed it also in Nuremberg, where the needle pointed ten degrees East of North. Columbus' explanation of the declination to his sailors is interesting. He kept silence about it at first, but when they grew alarmed, believing that the laws of nature were changing as they advanced farther and farther into the unknown, he told them that the needle did not point to the North Star, which had been called the Cynosure, but to a fixed point in the celestial sphere and that Polaris itself was not stationary, but had a rotational movement of its own, like all other heavenly bodies. They trusted him and their fears were allayed and a mutiny averted. When on his return to Spain he reported the many and definite observations on the variation of the compass which he had made he was told by the scientists of the time that he, and not the needle, was in error, because the latter was everywhere true to the pole. Just why they were sure it was so they could not tell, but they refused to believe even observations which showed that it was not so; though these were reported by a man who had just overturned quite as strong convictions by sailing westward and reaching land. It is such contradictions of what seem to be obviously first principles of science that in all ages have constituted great discoveries and required genius to make them.

CHAPTER XI

BIOLOGICAL SCIENCES

It is usually assumed that the biological sciences have developed in comparatively recent years and that above all nearly 500 years ago in the fifteenth century there could be no question of any developments that would be of any serious significance in the history of science. The word biology itself is only about a hundred years old and very often it is assumed that human interest in departments of knowledge begins with the naming of them. A period, however, that saw such magnificent work in the physical sciences and especially such a revolution of thought by means of observation as came through Copernicus' theory, was not likely to neglect the biological sciences entirely. As a matter of fact, biology, taking the word in its broadest sense, made some magnificent strides at this time. Perhaps no period until our own witnessed such significant advances in every department of the biological sciences.

It is often said that the people of the Middle Ages had very little interest in the world around them. Indeed, surprise is often expressed that they should not have occupied themselves more with the wonderful book of nature lying so invitingly open before them and given themselves more to nature study. Some have even ventured to seek the reason and have thought that they found in it an exaggeration of interest in another world than this, and mediæval lack of interest in natural truth has been attributed to over-occupation with the supernatural. Those who dare to think, however, that the people of the Middle Ages were not interested in nature know nothing at all of the great writers of that time. They are profoundly ignorant of the broad interests of those whom they so lightly criticise. Dante is full of nature study. More than any modern poet, with perhaps one or two exceptions, he has used his knowledge of nature and of science to illustrate his meaning in many passages of his poetry. One needs but turn to the "Divine Comedy" almost anywhere to prove this. In his "Treatment of Nature in Dante," Professor Oscar Kuhns of Wesleyan University has demonstrated this beyond all doubt.

Three voluminous encyclopædias of knowledge, including many of the wonderful facts of nature, were compiled in the thirteenth century. Such men as Albertus Magnus, who has many volumes of scientific writing on natural subjects and who made collections and observations of all kinds, Roger Bacon, who has so many almost incredible anticipations of modern knowledge, and Thomas Aquinas, who used the facts of nature as known in his time for the basis of his philosophy quite as Aristotle did long before, all were enthusiastic nature students. They did not know many things which the modern schoolboy can easily learn, for we have accumulated a great deal of information; since not a little that they thought they knew was wrong,—but that has been true in every period of the world's history of science and even our own will not escape that inevitable law, but they knew ever so much more than is usually thought and what they knew was much more significant for real scientific progress than any but special students of their works have any idea of.

It will not be surprising, then, to find that there were magnificent foundations laid in the biological sciences in Columbus' Century, and that indeed the work of this period represents some of the most important fundamental truths in these sciences. Anatomy, for instance, received a development during the Renaissance period that made it an independent scientific department. Men began to think again for themselves and make their own observations in the first half of the century. It is rather interesting to see the details that were added to the previous knowledge of anatomy, for these demonstrate the fact that they were observing accurately. A few examples will suffice to make this clear.

Achillini noticed the *ductus choledochus,* the duct leading from the liver into the duodenum, and described the ilio-cæcal valves. Berengar of Carpi corrected a number of mistakes that had existed in Mondino's *Anathomia,* the text-book which had been most used since the beginning of the fourteenth century, and he discovered the foramina in the sphenoid bone. He will have, perhaps, still more of interest for our time, because he was the first to describe the vermiform appendix. He was also the first apparently to call attention to the fact that the thorax in men and the pelvis in women are wider in each case proportionately than in the other sex, and that roughly, while the feminine form is conical, the masculine is an inverted cone. Canani added much to the description of the muscles and was the first to notice the presence of valves in veins, discovering them in the *vena azygos*. Gabriele Zerbi noted the oblique and the circular muscles of the stomach and described the puncta lachrymalia, the ligamenta uteri and other anatomical details which had escaped description previously. His book on anatomy divided the bones and muscles and blood vessels into different chapters, and order was beginning to come out of the confusion that had existed because of the too-generalized teaching before.

It is of the anatomists of this time that Puschmann in his "History of Medical Education" says, "The Italian anatomists had the habit of making the dissections of bodies for themselves, and it is for this reason that all the great anatomical discoveries of the time come from Italy. The anatomical schools of that country were the best in the world. All the greatest anatomists of the sixteenth century received their education there, and among the masters of the Italian schools are to be found the greatest names of which the science of anatomy can boast." Neuberger in his "Handbook of the History of Medicine" * says, "The Italian professors, incited by the brilliant example of 'Mondino,' surpassed all the other anatomists of the world because they did not disdain to take in their own hands the anatomical scalpel, and it is for that reason that at this time anatomy in Italy was cultivated with greater breadth of vision than elsewhere. The Italian anatomists initiated at the end of the fifteenth century the most famous period in the history of the art of dissection and became the teachers to the physicians of the whole world."

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* Neuburger u. Pagel: "*Handbuch der Geschichte der Medicin*"; Jena, 1903, Vol. II, p. 23.

Martinotti in his "The Teaching of Anatomy in Bologna Before the Nineteenth Century"* gives a very good idea of the thoroughly scientific spirit of their investigations and their ardent curiosity with regard to anatomical details, as these may be gathered from the commentaries of Berengar of Carpi. He says, for instance, "Let no one think that by word of mouth alone or the study of books, this science of anatomy" [he calls it discipline] "can be learned. For this the sight and touch are absolutely necessary." "Nor can any real knowledge of the members of the human body be obtained from a single dissection, for this a number of dissections are required." He himself says in suggesting with true scholarly spirit how little he knows in spite of his opportunities, in order that others may be encouraged to take as many opportunities as possible, "how many hundreds of cadavers have I not dissected." This expression is sometimes said to be an exaggeration, but it is in accord with the whole trend of Berengar's method of study. A dissection in the old time did not mean a complete study of the anatomy of the body by anatomical methods, but any opening of the body, in order to determine a particular point or to study any special part, was called an anatomy or dissection. Berengar insists frequently that a number of preparations and sections of the same viscus should be studied. He confesses that he had sectioned more than 100 cadavers in order to determine a question in brain anatomy and yet was not satisfied.

The interests of the artists of the Renaissance in painting not merely the surface of things, but giving an idea of what they actually were, led to a great development of curiosity as to the constitution of human beings. Not a single great artist of the Renaissance failed to make dissections for himself, and the greater the artist, the more dissections, as a rule, we know he made. Michelangelo dissected portions at least of more than 100 bodies, and Leonardo da Vinci probably did even much more than that. He proposed at one time to write a text-

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*G. Martinotti: *L'Insegnamento dell' Anatomia in Bologna Prima del Secolo XIX;* Bologna, 1911.

book of anatomy. Ordinarily, it would be presumed that any such proposition from an artist could scarcely be taken seriously in the sense of a scientific text-book to represent real contributions to anatomy as a science, though it might, of course, be valuable for artists. In recent years, however, the republication of the sketches of his dissections shows that Leonardo da Vinci might have written a very wonderful text-book of anatomy and that his plates are still valuable for the study of professed anatomists.

William Hunter declared that "Leonardo was the greatest anatomist of this period," and, as altogether we have some 750 separate sketches of dissections which he had actually studied, some idea of how much he accomplished can be obtained. These sketches represent not merely the muscles and the skeleton, though they give these very well and especially suggest their functions very completely, but they also contain sketches of all the viscera and even cross-sections of the brain at different planes. This book alone, without anything further, would give Leonardo a distinguished place in the history of physiology as well as of anatomy.

With all this in mind, it is amusing to know the impression rather prevalent among even educated people that there was Church opposition to dissection at this time, and to have such books as President White's "Warfare of Science with Theology" represent Vesalius a generation after this as dissecting in fear and trembling because of the danger he was incurring from the violation of ecclesiastical laws against dissection. No such laws were ever in existence, and dissection for scientific and artistic purposes was apparently much better provided for than it is even in our time, and above all much better cared for by the ecclesiastical authorities who might have hampered it so much, than it was in the English-speaking countries two or three generations ago, when ardent students of anatomy had either to "resurrect" bodies themselves or buy them—as many of them did—from "resurrectionists," with all the abuses connected with this practice, in order to secure anatomical material.

The supreme development of anatomy in Columbus' Century came with Vesalius. After exhibiting his trend of mind towards scientific and especially biological studies as a boy by the dissection of small animals, the suggestion for which had come to him from the study of Albertus Magnus' books, Vesalius went to Paris in order to find opportunities for anatomical study; but while profiting not a little there, he was rather disappointed because of the lack of facilities. The jealousy of his teacher, Sylvius, which he aroused, made his work still more difficult, so he went down to Italy, where he knew that he could secure material for dissection and opportunities for study. There, before he was twenty-five, they made him professor of anatomy at the University of Padua, and he had the opportunity to write his great text-book on anatomy, the "*De Fabrica Humani Corporis*," which has remained a classic down to our day.

It would be rather difficult to enumerate all the discoveries that we owe to Vesalius. He well deserves the name of the Father of Modern Anatomy. Practically all of his productive life comes in Columbus' Century, and he illustrates how thorough the scientific men of the time were in their modes of thinking and ways of observation. Details that might have been expected to escape him are described most clearly. He was the first to point out that nerves penetrated muscles and to suggest the physiological function that they performed of bringing about contraction. He discovered the little blood vessels that enter bones, the nutrient arteries, but still more definitely described the nutrition of bones through the periosteum and its rich blood supply. He added greatly to the knowledge of the time as regards the anatomy of the abdominal wall and of the large organs of the abdominal cavity, especially the stomach and the liver. His descriptions of the sex organs are far in advance of all that his predecessors had known, and here his anatomical knowledge also became of value for suggestions in physiology,—the two cognate sciences were, as might be expected, developing together. Vesalius described the heart completely and suggested its mechanism, and yet could not get away from Galen's declaration that the blood passes through the septum of the heart. His description of blood vessels and their inner and outer coat shows how carefully his observations were made. He declared afterwards that he was led to make these investigations by the memory of his dissection of the bladders with which he used to play as a boy and which he found to consist of several coats.

There is scarcely a department of anatomy on which Vesalius' name is not stamped deeply. He devoted great care, for instance, to the examination of the brain, emphasized the distinction between the gray and white matter, described the corpus callosum, the septum lucidum, the pineal gland and the corpora quadrigemina.

Two at least of Vesalius' disciples and assistants in teaching deserve to be named in the great development of anatomy that came at this time. One of them is Realdus Columbus, to whom we owe the discovery of the circulation of the blood in the lungs, and the other, Fallopius, whose name is familiar from its attachment to important structures in the body which he first described. Columbus we shall have more to say of under physiology, for the circulation of the blood was an important contribution to that science. Columbus' work was done at Rome, whither he was invited by the Popes to teach at the Papal Medical School, and where his directions and demonstrations were attended by cardinals, archbishops and distinguished ecclesiastics. He had been Vesalius' prosector at Padua and had succeeded him at Bologna, and then was invited to Rome. He wrote a great text-book of anatomy, which was dedicated to Pope Paul IV, and it was one of the treasures of the Renaissance both because of the development of anatomy which it represents, and its value as one of the early beautifully printed and illustrated books of the medicine of this time.

Fallopius, the gifted pupil of Vesalius, of whom Haeser, the modern historian of medicine, has said that he was " one of the most important of the many-sided physicians of the sixteenth century," followed his master's work, corrected some details of it and added many new facts. We are not quite sure of the time of his birth, but he was probably less than thirty, perhaps only twenty-five, when he became professor of anatomy at Ferrara. He subsequently occupied the chair of anatomy at Pisa, and later of anatomy and surgery at Padua. He added much to what was known before about the internal ear and described in detail the tympanum and its relations to the osseous ring in which it is situated. He also described minutely the circular and oval windows and their communication with the vestibule and cochlea. He was the first to point out the connection between the mastoid cells and the middle ear. His description of the lachrymal passages in the eye was a marked advance on those of his predecessors, and he also gave a detailed account of the ethmoid bone and its cells in the nose. His contributions to the anatomy of the bones and muscles were very valuable. It was in myology particularly that he corrected Vesalius. He studied the organs of generation in both sexes, and his description of the canal or tube which leads from the ovary to the uterus attached his name to the structure. Another discovery, the little canal through which the facial nerve passes after leaving the auditory, is also called after him the *aquæductus Fallopii.*

Puschmann in his "History of Medical Education" says of Fallopius (p. 297): "He furnished valuable information upon the development of the bones and teeth, described the petrous bone more accurately, enriched myology by admirable descriptions of the muscles of the external ear, of the face, of the palate and of the tongue, made explicit statements upon the anastomotic connections of certain blood-vessels—for instance, of the carotid and vertebral arteries—and discovered the nervus trochlearis. He instituted accurate investigations upon particular parts of the organ of hearing and of the eye, by which he was able to give fuller information upon the *ligamentum ciliare,* the *tunica hyaloidea,* the lens, and other anatomical points."

As great, if not greater, than either as an anatomist was Eustachius, to whom we owe a series of important discoveries. He studied particularly the renal system and the head. His name is enshrined in the Eustachian tube named after him. It has been said that after Eustachius' time very little was added to our knowledge of the gross anatomy of the teeth. He also made important discoveries in brain anatomy. Unfortunately his text-book was never finished, and the beautiful illustrations, the first copperplates for an anatomical work ever made, were not published in his lifetime. They were faithfully preserved, however, in the Library of the Vatican, for, like Columbus, he was a professor at the Papal Medical School in Rome, and were published at the beginning of the eighteenth century by Lancisi, himself, another Papal physician.

Another of the distinguished anatomists of the time was Aranzius, who was the Professor of Anatomy in the Papal University of Bologna for some thirty-two years just after the close of our period, having received his training, however, in our century. He gave the first correct account of the anatomy of the fœtus and was the first to show that the muscles of the eye do not arise from the dura mater but from the margin of the optic cavity. He confirmed Columbus' views with regard to the course of the blood in passing from the left to the right side of the heart, and made a number of discoveries in the anatomy of the brain. To him we owe the term *hippocampus,* and he described the fourth ventricle very accurately, calling it the cistern of the cerebellum.

The scientific development of physiology followed immediately, as might be expected, on that of anatomy. Indeed, Vesalius deserves almost as much credit for what he did for physiology as for his researches in anatomy. The functions of bones, muscles and organs were, as we have said, carefully discussed in connection with the descriptions of their form, location and relations to other organs.

Probably the best way to present the advance made in physiology at this time is to review the important steps of progress toward that greatest generalization in modern physiology, the circulation of the blood. Much more had been known of it before this time than is usually thought, and probably even the ancients, especially in Greece, had more than a hint of it. Before Columbus' Century closed, the discovery of the pulmonary circulation was an accomplished fact, and there was more than an inkling of the existence of the general circulation. The full description of this was not made until afterwards, but it was not long delayed, and it came from a man who belongs to our time. It did not receive that thorough scientific statement which was to make it a fundamental principle in the biological science of the time until Harvey's day, nor indeed for some time after Harvey's thoroughly scientific description and demonstration.*

Harvey himself indeed has acknowledged his indebtedness to these men of preceding generations, and any fair-minded review of the subject makes it clear that there was a gradual progress towards this all-important generalization for several generations, and not that sudden discovery which is sometimes thought to have taken place. In 1546 Servetus, who had been Professor of Anatomy at Paris, but who had a tendency to dabble in theology that subsequently proved unfortunate for him, for, as will be recalled, he was burnt to death by Calvin at Geneva in 1553, sent to Curio, who was teaching anatomy at Padua, a manuscript copy of his "*Restitutio Christianismi,*" "The Restoration of Christendom," in which he described completely the circulation of the blood in the lungs.

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* How clearly Rabelais understood the function of the circulation, though he did not properly appreciate its physiological anatomy, may be readily seen from his famous passage on the circulation, in which he talks about the blood as "the rivulet of gold which is received with such joy by all the organs because it is their sole restorative." A portion of the passage is worth while quoting because it represents a popularization of the scientific knowledge of the time. Rabelais was writing not for physicians nor even medical students, but for the educated general public of the time. He said:

"The Spleen draweth from the *Blood* its terrestrial parts, *viz.* the Grounds, Lees or thick Substance settled in the bottom thereof, which you term *Melancholy;* the Bottle of the Gall subtracts from thence all the superfluous *Choler:* whence it is brought to another Shop or Work-house to be yet better purified and refined, that is the Heart, which by its agitation of Diastolick and Systolick Motions so neatly subtiliseth and inflames it, that in the *right-side* Ventricle it is brought to Perfection and through the Veins is sent to all the Members; each Parcel of the Body draws it then into itself, and after it's own fashion, is cherished and alimented by it: Feet, Hands, Thighs, Arms, Eyes, Ears, Back, Breast, yea, all; and thus it is that who before were *Lenders,* now become *Debtors.* The Heart doth in its *left-side* Ventricle so thinnify the Blood that it thereby obtains the name of Spiritual; which being sent through the Arteries to all the members of the Body, serveth to warm and winnow or fan the other Blood which runneth through the Veins; The Lights never cease with its Lappets and Bellows to cool and refresh it; in Acknowledgment of which good the Heart through the Arterial Vein imparts unto it the choicest of it's Blood: At last it is made so fine and subtle within the *Rete-Mirabile,* that thereafter those *Animal Spirits* are framed and composed of it; by means whereof the Imagination, Discourse, Judgment, Resolution, Deliberation, Ratiocination, and Memory have their Rise, Actings and Operations."

Because Servetus' description first appeared in a theological work, it has sometimes seemed to commentators that his expressions were scarcely more than accidental and that it was only by chance that he reached such a generalization. To say this, however, is to ignore Servetus' career. He was an investigator of a thoroughly scientific spirit, living in a time when discoveries, particularly in the biological sciences, were being made all round him, and he had made many dissections, had taught anatomy at the University of Paris and was exactly in the most appropriate position to make such a new discovery. He had done some distinguished work in botany, he had suggested some modifications in pharmacology which met with violent opposition, but have since been approved, and like so many of the men of the Renaissance he had "taken all knowledge for his province" with a wonderful degree of success. Unfortunately he invaded theology and then got into trouble. He had to fly from Paris, though probably the prosecution of him was due not a little to the enemies created by his uncompromising spirit in the controversy over the use of syrups. He was protected by the Archbishop of Vienne, who had him as physician for a dozen of years, and it was Calvin who denounced him to the Roman authorities in such a way that even the friendly Archbishop could no longer protect him. He was allowed to escape from jail by connivance, went to Geneva and there met his sad fate.

It may not be true, as has been said, that by putting him to death Calvin put back the development of physiology for three-quarters of a century until Harvey's time, but undoubtedly Servetus' death was a very unfortunate incident for science.

Just about this same time a series of discoveries in Italy led up to the thought of the existence of a circulation of the blood in lungs and body. Already in the first edition of his great text-book of anatomy in 1543, Vesalius had expressed doubts with regard to the Galenic doctrine that the blood passed through the septum of the heart from one ventricle to another, and these doubts he emphasized in the second edition. In 1547 Cananus, Professor of Anatomy at Ferrara, observed the valves in the veins, and these are said to have been described even before this, though the doctrine of their existence and function was not generally accepted in science until after the more complete description made by Fabricius of Aquapendente, who was born in our century but did his important work afterwards. Columbus, who was teaching anatomy at the Papal University of the Sapienza in Rome, was even more complete and explicit in his description of the pulmonary circulation than had been Servetus. The question as to whether he knew of Servetus' discovery has never been absolutely settled, though there seems very little likelihood of it. Apparently the one possibility is that a copy of the edition of the "*Restitutio Christianismi,*" which was burned with its unfortunate author, may have been spared and found its way to Rome. Rome is indeed the least likely place for such a book to have wandered, and only two copies of that first edition are definitely known to have escaped. Of these Columbus could have known nothing. Harvey himself, to quote Professor Foster in his "History of Physiology," spoke of Columbus with respect as of a great authority.

Columbus' work has sometimes been minimized in Western Europe, especially by the English, apparently in the fear lest recognition for him should lessen Harvey's glory. Harvey himself, however, quotes Columbus as an authority in his work on the circulation, and the Italian anatomist, who had been Vesalius' assistant, was undoubtedly a great teacher, investigator, dissector, experimenter, observer and writer with regard to a number of phases of medical science. He was the first to insist on demonstrations of living animals as valuable in the teaching of medicine. He declared that one could learn more about the functions of the body from the dissection of a single dog than from feeling the pulse for hours and merely studying Galen. He made demonstrations on living animals and was constantly engaged in trying to find out function as well as anatomical details. A number of workers in the medical sciences toward the end of Columbus' Century were making experiments of various kinds on living and dead animals in order to develop physiology. Eustachius studied the kidneys experimentally, and the sensory functions were investigated very carefully and with the true scientific spirit.

The completion of the discovery of the circulation of the blood came in the person of Cæsalpinus, who had received all of his education in Columbus' Century. Anyone who reads his description of the systemic circulation cannot fail to recognize that he really understood it. His discovery did not impress his generation as did that of Harvey in the next generation, nor did he understand so thoroughly the significance of his discovery. The Italians, however, have quite rightly insisted on vindicating for him the merit of having discovered the circulation of the blood, and some of them have even suggested that Harvey learned of it from him, but nothing can dim Harvey's glory as a great trained observer and original genius, who appreciated thoroughly the nature of the revolution that his discovery would work in the medical sciences. Harvey himself would have been the first to deprecate the lessening of the glory that was due to his predecessors or to his great teachers in Italy, one of whom, Fabricius da Aquapendente, belongs partly to our century. Indeed, in his book on the circulation, Harvey has given more credit to his predecessors than many of his ardent English advocates are prone to do in the modern time.

Professor Foster in his " Lectures on the History of Physiology During the Sixteenth, Seventeenth and Eighteenth Centuries," which were delivered as the Lane Lectures in San Francisco, and some of them also at Johns Hopkins, concedes Cæsalpinus' priority of description. He says (page 33):

" He thus appears to have grasped the important truth, hidden, it would seem, from all before him, that the heart, at its systole, discharges its contents into the aorta (and pulmonary artery), and at its diastole receives blood from the vena cava (and pulmonary vein).

" Again in his ' Medical Questions,' he seems to have grapsed the facts of the flow from the arteries to the veins, and of flow along the veins to the heart."

On page 35 of the same work Professor Foster says: "We must, therefore, admit that Cæsalpinus had not only clearly grasped the pulmonary circulation, but had also laid hold of the systemic circulation; he recognized that the flow of blood to the tissues took place by the arteries and by the arteries alone, and that the return of the blood from the tissues took place by the veins and not by the arteries."

Foster is prone to make little of Cæsalpinus as a man of book-learning rather than experimental or observational knowledge and as a scholarly writer rather than a scientific discoverer. It must not be forgotten, however, that Cæsalpinus, besides being a great anatomist, is one of the most important contributors to the botany of this time. He was the director of the first botanical garden regularly established in Italy, that at Pisa, which still exists, and he is called by Linnæus the first true systematic botanist. His work on plants distributed more than 1500 plants into fifteen classes distinguished by their fruits.

Every detail of the circulation is thus seen to have been understood, and Professor Foster has quoted the passages from Cæsalpinus' books which make the necessity for such an admission very clear. The Italians have always claimed the discovery of the circulation for Cæsalpinus, and the Southern nations of Europe generally have been inclined to favor that claim, though the Germans and English have refused to admit that even Cæsalpinus' description, with all its clearness of detail, can be taken to mean that he understood the new doctrine that he thus was teaching. Besides, it is pointed out that Cæsalpinus' new doctrines met with very little response and indeed scarcely any notice from his contemporaries. It must not be forgotten, however, that Harvey himself hesitated for some dozen years to publish his demonstration of the circulation of the blood, and there is good reason to believe that while he presented his views to his class in 1616 and wrote his treatise in 1619, he delayed its publication until 1628 and was even then apprehensive lest its appearance make "mankind his enemy." It is not surprising, then, in the light of this recognized attitude of the scientific mind of the time that Cæsalpinus' declarations of half a century before should have been passed over by scientists without proper recognition of their significance.

Any account of the development of the biological sciences at this time would be quite incomplete without the great story of the botanists who laid the broad, deep foundation of their favorite science during this century. The first distinguished name among them is that of Leonardo da Vinci, the story of whose work in botany seems almost incredible until the actual notes of his observations are before one. While Leonardo has been thought of always as a painter and only recently has the idea of his greatness as a scientist become generally known, he deserves eminently to be classed as one of the greatest of scientific geniuses. It was in the biological sciences that he did his most wonderful work. He knew the anatomy of men and animals very well and studied whole series of questions touching living beings. He did work in botany, palæontology, zoology, physiology, so that Duval did not hesitate to speak of him in the *Revue Scientifique* * as A Biologist of the Fifteenth Century. He made special observations on flying, on swimming, on the saving of life in shipwreck, on the mechanics of joints, on horse movement, so that he anticipated what we have learned by the camera. His special contribution to physiology was that certain acts of the nervous system are reflex, that is, without requiring attention from the higher centres.

His studies in color are among the most interesting done up to his time. These were not merely taken up from the physical standpoint but especially from the physiological, and his theory of color vision still attracts attention. He studied sound and made many valuable observations once more physiological as well as physical. His most interesting scientific conclusion was doubtless that with regard to fossils. Having met with them deep below the surface of the earth, he declared that they were not there by accident nor by any incompleteness of creation, but that they represented living things which had been covered up. He even suggested that marine fossils pointed to the fact that the sea had at some time covered this spot where the fossils were found, though this was now far from water and well above its level.

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* December 7, 1889.

Some of his information with regard to botany was far ahead of his time. He not only knew that the rings seen in the wood of the trunk of a tree represent its age, one ring for each year, but he also knew how to deduce from the differing thickness of the various rings the particular kind of season and how favorable it was for growth. In Italy moisture represents to a great extent the most important element in a favorable year for plant growth. Leonardo seems to have shown by the story of certain years in the past that when moisture was abundant the rings of the trees were thicker than they had been in other years. He pointed out, too, that the core of the trunk of a tree, the heart of the wood as we call it, was not in the centre of the tree as a rule, but always a little to one side because the tree had more sunlight and heat on one side and grew more in that direction. He pointed out too that when a tree is injured an abundance of sap is carried to that spot in order to bring about repair, and that these processes of repair always make a superabundance of tissue, as if to overstrengthen a weaker part—hence the irregularities that are likely to exist on a tree where injuries have been inflicted. The sketches of dissections of flowers found in his notebooks show how well he anticipated many methods of study and details of knowledge in botany supposed to be much more modern. They have proved as great a surprise as his anatomical plates.

The professional botanists of this period have been very thoroughly reviewed by Professor Edward Lee Greene, Professor of Botany at the Catholic University and Associate in Botany in the United States National Museum, in his "Landmarks of Botanical History," which forms part of Volume LIV in the Smithsonian Miscellaneous Collections. He has called attention particularly to the work of the great German Fathers of modern botany during the late fifteenth and early sixteenth centuries. There are five of them who deserve a prominent place in the history of botany. Otho Brunfelsius (1464-1534), Leonhardus Fuchsius (1506-1566), Hieronymus Tragus (1498-1554), Euricius Cordus (1486-1535) and Valerius Cordus (1515-1544). The four first named represent two distinct kinds of botanical work. Brunfels and Fuchs busy themselves almost wholly with medical botany. Their one idea was to describe plants that could be used in medicine or make special additions to the diet. Most of their plant descriptions are copied from older authors, some of them even the Greeks, but for practical purposes they sought to render the identification of medical plants more easy and certain by supplying pictures of them. There had been botanical pictures before but they were miserable as a rule, and both Brunfels and Fuchs greatly improved the representations. As Greene says " these two might worthily have been styled Fathers of Plant Iconography."

Books of botany must have been popular before this and indeed it was probably because of the ready sale of such works that Brunfels and Fuchs took up their elaboration of them. Their large picture books now made it possible for all sorts and conditions of men, lettered and illiterate, to identify some hundreds of useful plants; a thing which had never happened in the world before that day. They added little to scientific botany, however, but fortunately other men, Tragus and Valerius Cordus, laid serious scientific foundations for the true science of botany. Neither of these men wished to popularize botany so much as to make it possible for plants to be so described as to be readily identifiable by description. As Greene says " on Cordus' part it is unmistakable that there is a deliberate plan of creating a new phytography. Therefore and by study of the men and their books I think we shall perceive that in the Germany of the first half of the sixteenth century there were two fathers of plant iconography and two fathers of descriptive botany."

Greene can scarcely say too much of the work of young Cordus. He says (page 272): " To understand the exalted character of this genius it is only necessary to canvass what the youth had also attained to along other and different lines at the same time.

" In field work in Germany—for botany alone—not to speak of geology and mineralogy, in both of which he was, for his time, an expert—he had wrought out more results than had his older contemporaries, Brunfelsius, Tragus, and Fuchsius combined. In his repeated journeys to the great forests and wild-est mountain districts, it is estimated that he discovered several hundred new plants. Sprengel has given the Linnæan names of some twenty-five of these new discoveries of Cordus; and that is perhaps double or treble the number of novelties gathered in by the whole three above named; and they both were men of longer life and more or less extensive travel."

Greene re-echoes the praise of a contemporary in terms which show us that this young man, who lived less than thirty years, had all the qualities of a modern successful scientific investigator. Indeed that contemporary description is worth while having near one as a catalogue of qualities of the men who in every age succeed in science as a rule. It comes from Riffius' Preface to Cordus' "Annotations on Dioscorides":

"To the best possible education of an intellect naturally keen, there was united in him that happy temperament to which nothing is impossible, or even difficult of attainment. To these gifts he added a truly marvellous industry and assiduity in research; and above all, a most wonderfully retentive memory for everything he either saw in nature or read in books. In this he so greatly excelled as to be able to carry in mind in their entirety descriptions of things which he had not seen but was looking to find; thus having the descriptions always available whenever occasion called for the use of them."

Conrad Gesner at Zurich declared that the four books of Cordus are "truly extraordinary because of the accuracy with which the plants are described. A century and a half later, Tournefort named Valerius Cordus as having been the first of all men to excel in plant description. Haller, the distinguished botanist and historian in Linnæus' time, credited Valerius Cordus with having been "the first to teach independence of the poor descriptions of the ancients and to describe plants anew." Greene says of him: "One sees that in all his descriptions the same attention is given to the morphology and also to the life history of the plant in as far as this is known to him. In his practice of describing each species, both morphologically and biologically, he is a herald of our late nineteenth and early twentieth century writers who now that we have the microscope give life histories with minuteness of detail before impossible."

Evidently Columbus' period gave birth to men as great in the investigation of plants and as ardent in their desires to get the last details of truth as were the geographers and the navigators of the time to reach the ends of the earth and be able to map it out. There was a great wind of the spirit of investigation abroad and everywhere there were magnificent results from it. This school of botany in Germany with Valerius Cordus as the climax of it, whose untimely death before thirty was indeed an irremediable loss to science, illustrates this very well.

While the most important contributions to the science of botany during that period came from the Germans, Italy did not lag far behind in this subject, and France, Spain and Portugal supplied their quota to the science. Above all, it is to the Italians that we owe editions of Theophrastus, Dioscorides and the elder Pliny, works which contained so much of information with regard to the science of botany in ancient times and the modern publication of which brought about a reawakening of interest in that subject corresponding to what was noted in connection with every other republication of classical thought in the various departments of the intellectual life. The most important of the botanists of Italy was Cæsalpinus, professor of botany at Padua and director of the botanic garden there at the close of the Columbus' Century, but who was afterwards physician to Pope Clement VIII. To him, as we have seen in discussing the physiology of the time, we owe a complete description of the circulation of the blood in the century before Harvey. Cæsalpinus is called by Linnæus *primus verus systematicus,* the first true systematic botanist. His work, *"De Plantis,"* contains an immense amount of information and a complete classification of all the then known plants, some 1520 in number, into fifteen classes. The distinguishing characters of this classification are taken from the fruit and show careful observation and thoroughly scientific attention to details.

Cæsalpinus' place in the history of botany can be best appreciated from the praise of his colleagues in this department of science. John Ray, the English botanist of the end of the seventeenth century, in his history of plants declared that

Cæsalpinus' book "On Plants" was indeed a work from which much might be learned. Fabrucci and Carl Fuchs declare Cæsalpinus' treatise to be of first rank. Thomas Garzon, Pona of Verona and Balthazar and Michael Campi in the eighteenth century praised his work as thoroughly scientific. We have already quoted Linnæus' opinion of him and the modern father of botany gladly accepted the suggestion of Plumier that a newly discovered plant should be given the name of Cæsalpinus, in order that that name might be forever memorable in botany. Boerhaave, whom we think of much more as a physician than a botanist, but some of whose greatest work was done with regard to medical botany in the University garden of Leyden, advised a friend and disciple if he could buy any of Cæsalpinus' works, to do so, for they were among the best on the subject.

In France Ruellius, whose life is about equally divided between the fifteenth and sixteenth centuries, was the physician to Francis I and a distinguished botanist. He wrote scientific descriptions of a large number of plants and put beside them the ordinary names which they were called in various countries as he had obtained them from peasants, farmers and country-people generally in his travels. His work was an important contribution to the science of botany. Toward the end of his life Ruellius, like his distinguished contemporary and colleague, Linacre in England, became a priest. Another important French contributor to the science is Pierre Belon of the first half of the sixteenth century, though he had an interest in many other biological sciences. He wrote a valuable treatise on coniferous plants and a monograph on birds. This has attracted particular attention, because in it "he compared the skeletons of birds and man in the same posture and nearly as possible, bone for bone." As Garrison in his "History of Medicine" (New York, 1913) says: "this was the first of these serial arrangements of homologies which Owen and Haeckel made famous." Belon travelled in Greece, Egypt and the Orient as well as widely in Europe, mainly in the interests of *materia medica,* but everywhere picking up scientific information.

In Spain and Portugal writers in botany are the medical scientists and especially those who searched the Indies, West and East, for plants with medicinal virtues. They did much both for pure science and for medicine and some account of their work will be found in the chapter on "Medicine" and "America in Columbus' Century." As accumulators of information the biological scientists of all the countries of Europe during Columbus' Century probably contributed more to their various departments than their colleagues of any other corresponding period in the history of science, even our own. They had, of course, the advantage of fields ripe for the harvest, but they undoubtedly took full advantage of their opportunities. Of all of them might be said what Oliver Wendell Holmes said of the anatomists of the Renaissance. They gathered in the rich harvest of discovery like the harvesters in a grain field. After them in the next century came the gleaners, who found many scattered precious grains of knowledge that their predecessors with their rich harvest to care for had neglected. Finally, in the later time, came into the field the geese, who found here and there a grain of knowledge missed even by the gleaners and who made a great cackling whenever they found one. The kindly satirist was himself an anatomist, and we may take the exaggeration of his picture with proper discount, yet with a recognition that it has much more of truth than we always like to confess even to ourselves.

CHAPTER XII

MEDICINE

It is not surprising that there should have been a magnificent century of achievement in medicine at this time because their standards of medical education were at a high level and were well maintained. The medieval requirements for medical education had been three years of preliminary work at the university, four years in the medical schools, special courses in surgery if practice was to be in that department, and a year's experience with a physician before personal practice on one's own responsibility was allowed. The laws of the Emperor Frederick for the Two Sicilies in the thirteenth century were very strict in this matter and they constituted the standard which came to be very generally adopted. In the Italian universities the Papal charters explicitly demanded these requirements.*

We have a series of re-enactments on this subject just about the middle of the fifteenth century. Above all, clinical experience was required before the license to practise would be issued. In 1449 the medical Faculty of Paris required that graduates in medicine should diligently visit the hospitals or accompany a skilful practitioner in his visits to patients and refused to grant the license when this rule was not observed. In Ingolstadt graduates in medicine, according to the statutes of 1472, were obliged to take an oath that they would practise only as the representatives of their teacher, or of some other doctor of the faculty of that place, until they were considered skilful enough to receive the license for practice on their own responsibility.

In the hospitals of this time, which were large and well arranged, thoroughly ventilated and capable of being well cleansed, there was ample opportunity for clinical teaching and we know that it was taken. A manuscript of Galen of the fifteenth century which is preserved at Dresden has a number of initial miniatures, in which groups engaged in clinical instruction are noteworthy. In his " History of Medical Education,"* Puschmann notes the details of some of these. There is a picture of a patient suffering from some wasting disease, near whose bed stand a doctor and two nurses, while the doctor dictates a prescription to his pupils. There is a demonstration of leg ulcers by a physician to a pupil and a surgical operation on the leg performed by the pupil in the presence of his teacher, as well as the opening of an abscess in the axilla. There were hospitals in every town of 5,000 and this gave ample opportunities for clinical experience. When hospitals are numerous and well managed there must be physicians to attend on them and this provides opportunities for thorough study of patients.

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* For full details of this surprising, too little known formal development of medicine, see Walsh, "The Popes and Science," Fordham University Press, N. Y., 1907, where all the documents will be found.

The influences that were at work to lift medical education to a higher plane in practical efficiency may be judged from such expressions as those of Rabelais, who, in his letter on education in " Gargantua," suggests as preparatory studies for medicine, Greek and Latin with even a little Hebrew, for the sake of the Holy Scriptures, and natural science, especially zoology, botany and mineralogy, and " then carefully go over again the books of the Greek, Arabian and Latin physicians, not despising the Talmudists and Cabalists; and by frequent dissections acquire perfect knowledge of the outer world, the microcosm, which is man." He himself has shown in a number of passages that he had taken his own advice and even in his famous description of the anatomy of Lent in which his comparisons were formerly thought more or less fanciful, " they are extraordinarily apt and vivid and show deep knowledge of anatomy," while his descriptions of wounds show a competent familiarity with surgical anatomy. This might very well be expected, for Rabelais invented two surgical instruments, one for the reduction of fractures of the thigh bone and the other for operating in cases of strangulated hernia. He has at least one passage in which it is clear that he knew much more about the circulation of the blood than is usually supposed to have been known in his time and which demonstrates that there had been a gradual accumulation of knowledge on this subject before Harvey's time. (See chapter on Biological Sciences.)

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* Translation by Hare, London, 1891.

The interest in medicine can be best realized from the large number of medical books that were printed almost immediately after the discovery of printing. After theology medicine was the subject most occupying the attention of printers. During Columbus' Century a whole series of the classics of medicine was reprinted and made available for wide reading. The patience and scholarship required for this can only be properly appreciated by those who know the labor of reading the crabbed handwriting of the old manuscripts and collating them and the time required to elucidate erroneous readings that had crept in through the negligence of copyists. The world owes an immense debt to the Renaissance for this work. To a great extent these books have been neglected for the last two centuries and we are only now coming to realize how much the scholarly interest of that time meant for subsequent generations. Many of these books are now being republished to the great benefit of medicine. Not only were Hippocrates and Galen and Celsus and the other classics republished, but also the writers of the intermediate time, Aëtius, Alexander of Tralles, the great Arabian writers and then the important contributors to medicine and surgery in the later Middle Ages. The value of the debt thus owed is growing in estimation every year.

The publication of medical books, even during the score of years immediately after printing began to be employed, shows the intense interest in the subject. The first medical publication was a purgation calendar, that is, a list of the days of the year on which purgations should be practised. This was printed by Gutenberg, 1457. Heinrich von Pfolspeundt's "Treatise on Surgery" was printed in 1460; in 1470 medical treatises by Valescus de Tarenta, Jacopo de Dondis and Matthæus Sylvaticus were printed. In 1471 treatises by Mesuë and Nicolaus Salernitanus were put in type. In 1472 the old *"Regimen Sanitatis"* was printed and Bellegardo's monograph on "Pediatrics." In 1473 Simon of Genoa's "Medical Dictionary" was set up and in 1476 William of Salicet's "Cyrurgia" was given to the press. In 1478 the first edition of Celsus was printed, and the first printed edition of Mondino's "*Anathomia*" was ready for sale. In 1479 came the first edition of "Avicenna." In spite of the great losses of books that have taken place in the course of time because of fire, water, use and other enemies, we still possess many medical books printed practically in every year of the first quarter of a century after the discovery of printing. Unfortunately the neglect of these old classics during the eighteenth and early nineteenth centuries did more than all the other inimical elements put together in reducing the number of medical incunabula that we might have had.

The first great medical teacher of Columbus' period was Nicholas Leonicenus, born in 1428, who studied medicine at Padua, lived for some ninety-six years and was professor of medicine at Ferrara for over sixty years. He translated the "Aphorisms" of Hippocrates and some of Galen's works into Latin, and occupied himself with the application of the principles laid down in these great classics in his practice, and above all, in his teaching. He made it the business of his life to oppose the Arabian over-medication and especially the use of many drugs on general principles, and he insisted on natural modes of cure, diet, water, exercise, fresh air and the correction of any morbid habits that might have been formed. Probably more than anyone else he influenced the medicine of the first half of Columbus' Century and his work has come to be well recognized in recent years with the growth of interest in the history of medicine.

After him, one of the most important of the physicians of the time was Thomas Linacre, who, after studying some ten years in Italy, returned to England to become the attending physician to Henry VIII. His translations of Galen's works attracted wide attention and Erasmus, Linacre's friend, once declared that after Linacre's translation Galen now spoke much better Latin than he had Greek before. Linacre was a type of the learned physicians of the time and was one of the greatest scholars of the period. That scholarship did not make men impractical, Linacre's organization of the College of Physicians of England is abundant evidence. He found the practice of medicine on his return to England sadly degenerate, because there was no competent authority to maintain proper standards of medical education and prosecute those who attempted to practise medicine without any proper training and sometimes, indeed, without any knowledge of the subject. Through the charter from the King, at first for London and subsequently for England, the duty of caring for the protection of the public against the illegal practice of medicine was committed to the Royal College of Physicians. Linacre organized and endowed it, and it continues to exist and exert an excellent influence over medical practice in England under its original charter down to the present time.

Another of the distinguished contributors to medical practice at this time was John Caius, who also translated some of Galen's works and especially the *"De Medendi Methodo,"* his edition containing a series of annotations from his teacher Montanus, and from his own observations on patients. He is deservedly best known for his little book on the Sweating Sickness, in which he exhibited his power of observation and his ability to describe what he saw. Gesner, the great European biologist of the time, who was on terms of intimate relation by correspondence with Caius and knew his work on plants and animals very well, styled him, in the preface to his *"Icones Animalium,"* "a man of consummate erudition, fidelity and diligence as well as judgment," and in an epistle to Queen Elizabeth bestows upon him the eulogium of "the most learned physician of his age." Caius has the merit of introducing the regular practice of dissection into the English teaching of medicine. As Linacre had done, Caius too, as he grew older, used the money which he had accumulated as Royal physician and in the lucrative practice of medicine in London for academic foundations. Linacre founded chairs in Greek and medicine at Oxford and Cambridge, as well as the College of Physicians, and Caius, after having been the first president of Linacre's Royal College, founded Caius College at Cambridge, where he died in 1572. His last year of life had been disturbed by the looting of his rooms of a number of pious articles connected with the old Church to which he faithfully adhered, and Mr. Andrew Lang suggests that only Dr. Caius' timely, though untimely, death (he was but 63 years of age) prevented him from sharing the fate of the pious articles associated with the old faith which he had cherished as faithfully as the tenets of that faith itself.

One of the important teachers of medicine at this time was Giovanni de Monte, according to the custom of the time known by the Latinized name of Montanus. He was distinguished for his application of the humanities to medicine and his direct translations of Greek medical books into Latin, so as to avoid the errors which had come from the roundabout translation in the previous times of Greek into Arabian and then into Latin. To him, almost more than any other, is due the reputation that the medical school of Padua obtained at this time, for he gave a series of clinical lectures on the patients in the Hospital of St. Francis which were written down. They show how thorough were his observations and how suggestive his teaching. No wonder that he had pupils from all over Europe. His pupils thought of him as the Americans did of Louis during the early part of the nineteenth century. Many Germans went to hear him. It was a Polish student who reported some of his lectures and Dr. John Caius was, as we have said, one of his most ardent students. Montanus insisted on making careful inspections of the dead bodies in order to control his diagnosis, and the teaching at Padua under him was thoroughly practical and such as we are likely to think of as modern.

Quite different from the line of learned physicians who drew their inspiration from the Greek classics of medicine, was another of the great physicians of Columbus' period who ran counter to all the old medical traditions and dared to think for himself. This was Paracelsus, whose motto *"qui suus esse potest, non sit alterius"*—he who can form an opinion of his own should not borrow that of others—shows the independent character of the man. He broke away from the teachings of medicine in Latin and sought far and wide for anything and everything that might help in the cure of disease. He has been an extremely hard man for historians to estimate and appreciations of him have differed very greatly. There is no doubt at all that he did much to introduce chemical remedies of many kinds into medicine, though he was a decided opponent of the polypharmacy of his day, a heritage from the Arabian

TITIAN, PARACELSUS

physicians, who delighted in giving a large number of drugs. There are expressions of his which show how carefully he had thought out the problems of the practice of medicine. He said: "to be a true alchemist is to understand the chemistry of life." "Medicine is not merely a science but an art. It does not consist in compounding pills and plasters and drugs of all kinds, but it deals with the processes of life, which must be understood before they can be guided."

Above all Paracelsus recognized that success in medicine depends on the treatment of the patient rather than his disease, and he insisted on the idea that nature was, as a rule, eminently curative of diseases rather than prone to make the affection worse, as physicians at so many times in the history of medicine seem to have thought. Paracelsus declared that "the knowledge of nature is the foundation of the science of medicine and a physician should be the servant of nature, not her enemy; he should be able to guide and direct her in her struggle for life and not by his unreasonable drugging throw fresh obstacles in the way of recovery." He appreciated very clearly the influence of the mind on the body and said "the powerful will may cure where a doubt will end in failure. The character of the physician may act more powerfully upon the patient than all the drugs employed." He realized also the place of the conditions surrounding the patient as helpful towards his cure. He said: "the physical surroundings of the patient may have a great influence upon the cure of his disease. Diet is an extremely important element of cure and the physician should know how to regulate the diet of the patient." He called attention to the fact that trained attendants sympathetic with the patient are far better for him than relatives who may be over-solicitous and show it, or neglectful because they wish the death of the patient.

Paracelsus was the first to write on occupation diseases and his monograph on *"Bergsucht,"* "miner's disease," is a monument to his power of observation. His clinical acuity is further exemplified by his recognition of the relation between cretinism and endemic goitre. He also wrote a booklet on mineral baths and analyzed mineral waters for bathing and drinking purposes, getting at the iron content of chalybeate waters by testing with gallic acid, and the resultant ink reaction, and also demonstrating the presence of other salts. He did more than anyone else to establish properly in medicine the use of opium (as laudanum), mercury, lead, arsenic, and his chemical experiments taught him much about copper sulphate and potassium sulphate and he recognized zinc as an elementary substance.

He did quite as much for medicine by his negative conclusions and his opposition to medical practices that had been common up to his time as by his positive observations. Indeed it might possibly be thought that there was more to his credit from the negative side. He set himself up in strenuous opposition to the silly uroscopy and uromancy by which physicians had deceived others and very often deceived themselves. Something of the value of the urine in medical diagnosis had been recognized in the Middle Ages, and then, as practically always happens in medicine, little-minded men had pretended to be able to learn much more from it than could possibly be revealed by it. Every disease came to have its specific urine and diagnosis and prognosis came to be largely dependent on changes in the color and character of the urine that were in themselves quite insignificant. Paracelsus brushed all this ridiculous nonsense aside, but of course, in doing so, made a great many enemies. Men are much more disturbed, as a rule, by having their false knowledge corrected than their real knowledge amended.

Paracelsus also refused to accept the practically universal persuasion that every disease was an indication for blood-letting. He was sure that in a great many cases this practice did more harm than good. He felt the same way with regard to the almost universal purgation that was being practised for every form of ill. No one recognized better than he that there were poisonous substances in the body which produced serious affections. He was quite willing to be persuaded, too, that these poisonous substances could be at least to some extent removed from the body by purgatives. He feared, however, lest purgation might carry off with it many materials more beneficial to the body than the poisons it would drain were harmful. The idea of an autotoxemia or an autointoxication is constantly recurring in medicine, and the supposed remedies for its cure prove subsequently nearly always to have done more harm than good. Medicine owes much to Paracelsus for his firm stand in this matter. Shakespeare's genius in intuition was right when in "All's Well That Ends Well" he ranged the modern German with one of the greatest of the ancients. "So say I, both of Galen and Paracelsus."

Meyer in his "History of Chemistry" has summed up what Paracelsus accomplished by the co-ordination of chemistry and medicine. As it is not the purpose of the great German historian of chemistry to give a panegyric of Paracelsus but simply to indicate his place in the history of chemical evolution, that opinion must have great weight. He said, page 71:*

"Paracelsus was the man who, in the first half of the sixteenth century, opened out new paths for chemistry and medicine by joining them together. To him is undoubtedly due the merit of freeing chemistry from the restrictive fetters of alchemy, by a clear definition of scientific aims. He taught that 'the object of chemistry is not to make gold but to prepare medicines.' True chemical remedies had been used now and again before his time, but Paracelsus differed from his predecessors in the theoretical motives which led him to employ them. He regarded the healthy human body as a combination of certain chemical matters; when these underwent change in any way, illness resulted, and the latter could therefore only be cured by means of chemical medicines. The foregoing sentence contains the quintessence of Paracelsus' doctrine; the principles of the old school of Galen were quite incompatible with it, these having nothing to do with chemistry."

His contributions to surgery are almost more important than those to medicine, for he insisted on keeping wounds clean and deprecated the meddlesome surgery of the time. Cutting loose from everything that had been taught before his time, he almost necessarily made many mistakes. Besides, in spite of his insistence on scientific demonstration, he accepted many things for which there was no good reason. His works, most of which we owe not directly to himself but to his students, contain many absurdities. There is no doubt at all, however, that he was a great genius and that the medicine of this century and of succeeding generations owes much to him. He well deserves the name of the Father of Pharmaceutical Chemistry which has sometimes been given to him. He represents one of the important links in the tradition of medicine and is a man who is ever more appreciated the more we have learned about him through recent studies of his writings.*

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*"A History of Chemistry, from Earliest Times to the Present Day: Being also an Introduction to the Study of the Science," by Ernst von Meyer, Professor of Chemistry in the Technical High School, Dresden; translated, with the author's sanction, by George McGowan, Ph.D.; third edition; London: Macmillan and Co., 1906.

We have some two score of books attributed to him, but probably less than a score are really his. Probably no one has ever had a higher view of medicine. He bases it on the relationship which man bears to nature as a whole and anticipates the very modern idea that disease is not a negation, but itself a phase of life. Magnetism represents a great force for him and some form of it is supposed to emanate from all bodies and place them in relation with each other. The influence of the stars on human constitutions is only one phase of this magnetism which binds all the world together. The superabundance of vitality in certain men gave them a magnetic influence over other men and this magnetic influence might even persist after death. Hence mummies were supposed to contain a certain astral balsam and the consumption of mummy substance gave wonderful vitality to ailing persons. Like scientists at all times, Paracelsus had to have his explanation for miracles. He suggested that saints were people with an abundance of vitality and some of this remained in their bodies after their deaths just in the same way as it remained in the bodies of mummies. It was sufficient, then, to come within the sphere of the influence of these bodies to be affected by it. Miracles, then, were not exceptions to the laws of nature but merely fulfilment of laws that men were only just getting to understand. That has been the favorite mode of explanation for miracles ever since, though a new set of facts has always been adduced as the basis of the explanation.

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*Even Paracelsus' mistakes have had something of genius in them. Above all, his influence has lived on through the generations. His doctrine of signatures and his study of the effects of poisons on the human system had more to do than anything else with the establishment of the therapeutic systems of Hahnemann and Rademacher.

Of course Paracelsus believed in many absurdities. He suggests, for instance, that it is possible to transplant toothache into a tree after the following fashion. Having taken away a portion of the bark, a piece of the wood is cut and with it the gum is pricked until the blood flows. Then the piece of wood stained with blood is set again in its place in the tree and the bark is also replaced. He believed also in the vulnerary ointment, which could cure wounds, not by application to the wound itself but to the weapon. It was important, however, that the weapon should be stained with the blood from the wound. He had the feeling that the morbid elements of an affection or a wound were contained in the blood and might be neutralized even outside the body. The vulnerary ointment was composed of moss from the head of a dead person, preferably one who had been put to death for murder, mummy, human fat and human blood. It all seems so absurd to us now, but behind such prescriptions was the theory that some of the vital force of these human beings could be made over to the diseased person in order to add to his vitality. Many absurd prescriptions have been made on theories not nearly so reasonable as this of Paracelsus.

To this period also belongs the name of Basil Valentine, who has been called the last of the alchemists and the first of the chemists. Just now we are passing through a phase of historical criticism which throws doubt on his real existence, though we have a series of books under his name published at the end of the sixteenth century. Tradition declares that he was a Benedictine monk living about the middle of the fifteenth century, who tested many forms of drugs with the idea of securing materials for the cure of human diseases. To him is attributed the discovery of hydrochloric acid, which he called the spirit of salt, sugar of lead, and a method of preparing sulphuric acid and probably ammonia. He is best known for his work on antimony and his book, " The Triumphant Chariot of Antimony," put that metal and its salts into medical practice for centuries. The indication for it was that disease was largely due to a toxæmia or accumulation of poisons in the system, the modern idea of auto-toxæmia, and that these could be best removed by brisk purgation. The use of calomel subsequently, the theory underlying venesection and a great many of our modern surgical fads for the improvement of man's condition by taking something out of him have the same notion for basis.

Basil Valentine's works are precious because they insist that physicians must know the drugs they use and their effects, not merely by reading about them, but by studying them on patients and on animals. He himself is said to have tried the effect of antimony on the swine belonging to the monastery in which he did his work, and other materials are said to have been tested in the same way. He is thus really a father of experimental medicine. He cannot say too much in deprecation of physicians who give medicines which they know little about for diseases about which they know less. In my sketch of him in " Catholic Churchmen in Science " (Dolphin Press, Philadelphia, 1907) I quote a passage from his " Triumphant Chariot of Antimony," in which he bitterly condemns the practice of physicians who give remedies knowing practically nothing about them, only that they have been recommended by someone else. It read like a diatribe of the modern time against allowing the manufacturing chemist to suggest drugs for medical practice. The passage makes very clear what is the secret of the mystery by which remedies come and go in medicine because of insufficient testing. Valentine said:

" And whensoever I shall have occasion to contend in the school with such a Doctor, who knows not how himself to prepare his own medicines, but commits that business to another, I am sure I shall obtain the palm from him; for indeed, that good man knows not what medicines he prescribes to the sick; whether the color of them be white, black, grey or blew, he cannot tell; nor doth this wretched man know whether the medicine he gives be dry or hot, cold or humid; but he only knows that he found it so written in his Books, and thence pretends knowledge (or as it were, Possession) by Prescription of a very long time; yet he desires to further information.

Here again let it be lawful to exclaim, Good God, to what a state is the matter brought! what goodness of minde is in these men! what care do they take of the sick! Wo, wo to them! in the day of judgment they will find the fruit of their ignorance and rashness, then they will see Him Whom they pierced, when they neglected their Neighbor, sought after money and nothing else; whereas, were they cordial in their profession, they would spend Nights and Days in Labour that they might become more learned in their Art, whence more certain health would accrew to the sick with their Estimation and greater Glory to themselves. But since Labour is tedious to them, they commit the matter to Chance, and being secure of their Honour and content with their Fame, they (like Brawlers) defend themselves with a certain Garrulity, without any respect to Confidence or Truth."

Another of the great physicians of the time was Cornelius Agrippa, born in 1486, of the old family of Nettesheim. Cornelius was at first the secretary of the Emperor Maximilian, then a warrior and finally a student of both law and medicine, yet all was accomplished so expeditiously that when he was but twenty-four the Parliament of Dole came in a body to hear his lectures on the Cabalistic Books of Reuchlin. He practised for a while as a physician at Geneva after having been an advocate at Metz and, with the tendency to wander that so many of the men of this time had, we find him afterwards at Freiburg, at Lyons, then for a time the physician of Louise of Savoy, but jealousy drove him from the Court and a little later we find him starving in Antwerp, and then in prison at Brussels. He passed through Cologne, was at Bonn for a time and is heard from in prison at Lyons. He seems to have run the whole gamut of human suffering. It is hard to know what he was imprisoned for, but he seems to have been a man who easily made enemies, refused to think that anyone else knew much and probably his necessities led him into the doing of things that were suspicious at least, if not actually criminal.

Agrippa was very much interested in magnetism, quite taken with the idea of human magnetism and above all very much persuaded of the influence of the mind on the body. He felt the place that autosuggestion or strong persuasion has in enabling men to accomplish anything and he said: "We must therefore in every work and application of things affect vehemently, imagine, hope and believe strongly, for that will be a great help." He was quite sure that the mind could influence the body strongly for healing purposes and would doubtless have been looked upon as an advocate of New Thought or Psychic Healing or some of the other schools of mental therapeutics in our time, though he believed also in the use of medicines and remedial measures. Another phase of his anticipation of some modern ideas may be still more interesting for our generation, though it only shows how prone human thought is to run in cycles and how hard it is to find anything new under the sun: it may be rather surprising to many to learn that Agrippa seems to have had a definite persuasion that woman was superior to man. He was what the French would have called "a feminist of the most modern." A book of his on the subject recently appeared as a bibliographic treasure in the London bookseller, Tregaskis' catalogue (No. 736). The title was: "Female Pre-Eminence: or The Dignity and Excellence of that Sex Above the Male." An Ingenious Discourse: Written originally in Latine, by Henry Cornelius Agrippa, Knight, Doctor of Physick, Doctor of Both Laws, and Privy-Counsellor to the Emperour Charles V. Done into English with additional advantages. By H. (Enry) C. (are) Printed by T. R. and M. D. and are to be sold by Henry Milion, 1670. The catalogue contains the note: "Strong arguments in favor of women's superiority. It is rendered into English, well embroidered with poetic imagery and rich in furiously entertaining passages."

The most important scientific development for medicine came from pathological anatomy. This science is supposed as a rule to be of much later origin than the period we are occupied with, but the interest in the history of medicine in recent years has shown us how much of attention there was given to pathology and how many observations were accumulating in the published books of the Renaissance time. There was much more of such scientific observation in the Middle Ages than is usually thought. Three men at the beginning of

Columbus' Century, Professor Montagnana of Padua, Professor Savonarola of Ferrara, the grandfather of the martyred Dominican, and Professor Arcolani of Bologna, described a number of different lesions which they had noted in the many bodies that were being dissected at this time. In the next few years these observations multiply. Benedetti, the Professor of Anatomy at Padua and the founder of the anatomical theatre at that university, made reports on gall-stones and apoplexies. Benivieni, a simple practising physician at Florence, was probably the first to describe gall-stones and he has a very large number of pathological observations. He is the first that we know who made a number of autopsies with the definite idea of finding out the cause of death and he has come deservedly to be called, as a consequence, the Father of Pathological Anatomy. Allbutt, the Regius Professor of Medicine at the University of Cambridge, says of him: "Before Vesalius, before Eustachius, he opened the bodies of the dead as deliberately and clear-sightedly as any pathologist in the spacious times of Baillie, Bright and Addison," and Malgaigne has described his book as "the only work on pathology which owes nothing to anyone."

It became the custom then to collect observations of this kind and Berengar of Carpi, the discoverer of the appendix, who had dissected a great many bodies, described a number of pathological changes. Aranzi, the professor of medicine and of anatomy in Bologna, has many observations of pathological finds in his book and paid special attention to tumors. Ingrassias, professor of anatomy at Naples, was also interested in pathology and, as specializing had become the fashion, his observations were mainly with regard to bones. Eustachius, the professor of anatomy in Rome, declares in the preface to his anatomical tables that he was the first to make autopsies for pathological purposes in Rome, and that he had collected an abundant amount of material. The publication of Eustachius' anatomy was delayed until long after his death and his pathological observations were never published. Columbus in Rome made a series of autopsies even on high ecclesiastics for the purpose of determining the cause of death and evidently the science of pathology was gradually coming into existence. Vesalius made a large number of pathological observations and promised in his book on normal anatomy to publish them. Unfortunately he never did so, and his notes seem lost, though it is not impossible that the manuscript or some portion of it may yet be found in Spain.

In many other countries besides Italy, however, pathological anatomy attracted much attention. Joost van Lom, often known by his Latin name of Jodocus Lommius, a physician in Brussels, who was royal physician to King Philip II, published three books of medical observations at Antwerp just after the close of Columbus' Century (1560) in which notes of all diseases and problems of prognosis are set forth. Johann Kentmann, a physician of Torgau, devoted a great deal of attention to the study of the formation of all kinds of calculi in human beings, biliary, salivary and intestinal. Francisco Valles, Professor of Medicine at the University of Alcalá in Spain, published a volume of Galen's *"De Locis Affectis,"* in which he incorporated many notes of his own pathological observations. Jacques Houillier (Hollerius) published about the same time at Paris, where he was professor of medicine, a book on "Internal Diseases" with many pathological notes. Johann Weyer (Wierus) also added valuable pathological annotations to his writings.

At the end of the century pathological anatomy as a definite department of medicine had been firmly established. Dodoens (Dodonæus), Royal physician to the Emperor Maximilian II and Rudolph II, made a large number of valuable observations at autopsies and described cases of pneumonia, ulcers of the stomach, inflammation of the abdominal organs, aneurisms of the coronary arteries and of the arteries of the stomach, stony concretions in the lungs, purulent conditions of the ureters and kidney, and ergotism. Even more important for the science was the work of Schenck von Graffenberg, official physician at Freiburg in Breisgau, who gathered together a larger collection of observations on the diseases of separate organs than had ever been made since Hippocrates' time. He paid special attention to the pathological anatomy of these cases and while many of the observations were his own, a great many of them had been collected from friends. His work was done after the close of Columbus' Century, but he himself was over twenty before the century closed and he was only carrying out the inspiration that had been given by workers in that time. Pieter van Foreest (Petrus Forestus), a practising physician in Delft, deserves almost as much credit as Schenck von Graffenberg and much more than many of the professors in medicine and anatomy of this time. He made a special study of the pathological conditions of the ordinary diseases and was indefatigable in collecting information. His own observations include more than 100 cases with autopsies. With this spirit abroad the future of scientific medicine was assured.

A good idea of the accomplishment of the medical teachers of the time may be judged very well from the life of Fracastorius. Prof. Osler in his sketch of him published in his book, "An Alabama Student," says: "The scientific reputation of Fracastorius rests upon the work '*De Contagione.*' It contains among other things three contributions of the first importance—a clear statement of the problems of contagion and infection, a recognition of typhus fever and a remarkable pronouncement on the contagiousness of phthisis." In the same sketch Osler adds: "Fracastorius draws a remarkable parallel between the processes of contagion and the fermentation of wine. It is not the same as putrefaction, which differs in the absence of any new generation and is accompanied with an abominable smell. Certain poisons resemble contagion in their action, but they differ esentially in not producing in the individual the principle or germ capable of acting on another poison." This discussion is wonderfully complete and thorough, yet conservative. Later Boyle declared that a time would come when someone would discover the cause of fermentation and probably at the same time throw light on the origin of contagious disease. That prophecy was fulfilled when Pasteur made his studies in the fermentation of wine and beer and then went on to lay the foundation of bacteriology. Fracastorius' thoroughly scientific spirit will be appreciated from the fact that, like Leonardo, he saw fossils in their true light and has the first reference in the history of science to the magnetic poles of the earth.

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*Oxford Press, 1908.

Men whose names are usually associated with surgery often manifested successful interest, and above all, power of observation in pure medicine. A single example may be taken in illustration. Anyone who thinks that observation and theory and investigation of arthritism is new or that we have occupied ourselves much more with the study of its symptoms than they did in the olden time should read Paré's chapters on Gout. He says that the word gout, which appealed to him as French, was probably used because the humors distil drop by drop, *goutte à goutte* over the joints. Or perhaps because sometimes a single drop (goutte) of the humor of this disease causes very great pain. He describes the deposits of gypsum-like material, or stony matter like chalk, which occur in the affection. The severe pains which occur in connection with the disease Paré does not hesitate to attribute to alteration of the humors by a poison which he calls "*virus arthritique.*" He notes that the pains are distinctly influenced by atmospheric fluctuations, so that one may well say of the gouty that they carry with them an almanac which may serve them as a weather indicator all their lives. Serious complications can arise in gout if the humors of the disease involve other organs than the joints. He attributed inflammations of the liver, of the pleura, colicky disturbances of the intestines, to this cause. Continuous fevers represented for him the effect of the gouty toxin upon the large vessels, while paralyses might occur if the gouty toxin involved the "porosities" of the nerves.

He described a sanguineous gout frequent in the springtime, especially among young people with acutely inflamed joints, the pain being most severe in the mornings and the urine red and dense. This is evidently acute rheumatic arthritis. Bilious gout occurred more among the middle-aged and the involved joints were yellow rather than red and the pain attained its maximum intensity in the early afternoons. The urine was lemon yellow in color but often cloudy. The third form was pituitary gout which occurred particularly in the winter, having as a main symptom coryza, affecting the old rather than the young, but usually without acute pain. The affected area is cold rather than hot to the touch and the discomfort is most noted during the night. The urine was pale in color and thick.

Melancholy gout, the fourth form of the disease, was also an affection of old age, producing a livid color in the joints and making them cold to the touch. The patients' pains were worse at intervals of three or four days and the urine had a deep cloudy color. Sanguineous gout was the most curable of these four and usually lasted two to three weeks; bilious gout was much more serious and often ended in death. Pituitary and melancholy gout were chronic diseases of long duration. It is rather easy to see Paré's powers of observation in all this. He jumped to conclusions and over-generalized, as men have always done and thus made mistakes. Down even to the present day, however, physicians have never quite got away from the tendency to group these acute and chronic painful conditions of joints under a single word, and rheumatism for many represents the key to a puzzle that still exists.

An important development in medicine was the publication early in the sixteenth century of regulations by the Bishop of Bamberg and the Elector of Brandenburg, by which physicians or midwives were authorized to be summoned as experts in medico-legal cases. Medico-legal autopsies are on record long before this, though there was always serious objection to their performance because of the natural feeling of deterrence men have toward the destruction of the human body. In general, however, the basis of our legal medicine and the status of the physician in court as an expert was determined at this time.

Probably nothing shows so well the great interest of this time in the development of medicine and particularly therapeutics, as the number of drugs imported from America and the East Indies, the many experiments and careful observations made with them and the books written about them. As a matter of fact no century has given us more new drugs of enduring value. Schaer in the chapter on the history of pharmacology and toxicology in modern times in Puschmann's "Handbook of the History of Medicine" has summed up the work of this period. Three well-known books of the time containing interesting scientific material were written by Gonzalo Fernandez, a personal friend of Columbus who, from his birthplace, is often known as Oviedo, Nicolas Monardes and Francisco Hernandez. Fernandez was the superintendent of the government gold mines in South America, but after his return he wrote his great work, "*Historia General y Natural de las Indias.*" The second of these, Monardes, deserves well of pharmacology and all that relates to drugs through his famous collection of the natural products of America which became widely known through his description of them.* Hernandez wrote on Mexican and Central American plants and his "*Historia Plantarum Novæ Hispaniæ*" is an important source of information. Besides these, Pasi and Conti, Italians who had travelled in the East Indies, wrote books containing valuable observations on Oriental drugs and plants, and the Frenchman Bellonius (Pierre Belon) (See chapter on Biological Sciences) described Arabian, Persian and Indian products, while the Spaniard, Christobel Acosta, and the Portuguese, Garcia da Orta and Duarte Barbosa, visited various parts of the East and East African Malabar and wrote books which, while not specifically medical, had much to say with regard to the indigenous plants, especially such as either had been used by the natives for medical purposes or promised to be of significance in this way. The Portuguese apothecary Pirez directed a special letter with regard to Hindustan and Farther India and what might be expected for pharmacology from these regions to the king of Portugal which is of great importance.

The Belgian, Charles de l'Esclus, better known as a rule under his Latin name of Carolus Clusius, as professor of botany, director of the botanical garden and superintendent of the Museum in Vienna and later in Leyden, gathered together an immense amount of information, was in correspondence with all who were interested in botany and in pharmacology. He succeeded in making an encyclopedia of information with regard to these subjects that has ever since been considered one of the most important fundamental works in the history of this department of science.

The spirit of the physicians of the time as regards scientific methods in clinical medicine and their attitude towards observation as by far the most important means of obtaining medical truth is very well brought out by some passages written by John Hall, a poet and medical writer who wrote a translation of Lanfranc's *"Chirurgia Parva"* published shortly after the close of Columbus' Century. To this was appended "A very Frutefull and Necessary Briefe Worke of Anatomie" and "An Historiall Expostulation: against the beastlye Abusers, both of Chyrurgerie and Physyke in our Tyme: with a Goodlye Doctrine and Instruction Necessarye to be marked & folowed of all Chirurgiens." In the Expostulation, which may be found in the Percy Society's republication of old texts for 1844, Dr. Hall said: "Galen also hath freely admonished that we ought not if we will be perfectly cunning to trust only to doctrine written in books, but rather to our proper eyes which are to be trusted above all other authors, yea! before Hippocrates and Galen."

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* Monardes proved of so much interest that he was translated into English before the end of the sixteenth century, and his book was widely read.

It is this trusting to observation rather than books that is, of course, the key-note of clinical medicine and of medical progress. The men of this time are often blamed for not having trusted to their observation more and to their books too much. There is no doubt that some of them erred rather seriously in this matter. Yet at all times in the history of medicine the great majority of physicians have not observed for themselves, but have taken their observation at second hand from others. Hall has insisted over and over again that as regards surgery the necessity for observation was extremely important. In the chapter on Surgery a quotation from his Expostulation on this matter will be found.

Even in the department of mental diseases there were distinct contributions to the problems of this intricate specialty of great value. This is not so surprising, for above all the men of the Renaissance could see things for themselves and describe what they saw. Shakespeare represents the Renaissance in England and no one has ever succeeded so well as he in describing forms of the milder mental diseases as they occur in characters like Ophelia or King Lear. Paracelsus even attempted what has not been achieved yet, a definition of the insane person. "The person is sick in mind in whom the reasonable and unreasonable spirit are not present in proper proportion and strength." He distinguished fools "who are animals without any sense" from the imbeciles and idiots "who are deranged beasts." His contemporary, Montanus, who was professor at Padua, and has been called the second Galen, treated of melancholy in his medical consultations and ascribed its etiology to *intemperies cerebri.* He recommended treatment by water, by venesection and by hellebore. Jean Fernel divided melancholy into what we now know as melancholy in the proper sense of the word and mania. He considered that both affections were due to disturbances of the fluids of the brain. Jodocus Lommius differentiated between delirium, phrenitis, melancholia and mania and described a particular variety of this last form as hydrophobia. William Rondelet, Professor at Montpellier, frankly abandoned all metaphysics in this subject and considered that melancholia was due either to a defect of the brain or to some disturbance of the body which brought about a sympathetic derangement of the brain, the stomach particularly being likely to do this. He gave a rather striking picture of the fixed ideas that take possession of those suffering from melancholia. He differentiated mania from melancholia by saying that the melancholia was due to a frigid humor, while mania was due to the malignity of the thin and bilious humors of the body. His contemporary, Francis Varreliora, described cases in which insanity had occurred as a consequence of love troubles and in which the cure of melancholy came about through the successful treatment of an affection such as hæmorrhoids that had been disturbing the patient for a good while. It was a good many generations before medicine advanced very far beyond the ideas that were put forward by these physicians of the Renaissance in discussing their mental cases.

The extent to which balneotherapy was appreciated in this century may be realized very well from the fact that just after the close of it Winternach mentions some seventy-five places in Europe where there were bathing establishments. About the same time Dr. Ruland of Regensburg, published a monograph of twenty-eight pages containing an alphabetically arranged list of diseases with the indication of the particular watering place that would do them good. Indeed just after the close of Columbus' Century there is abundant evidence of the very great revival of interest in the old hydrotherapeutic methods which had taken place during the Renaissance.

One of the most interesting things about the medicine of this century, that is often not appreciated, is that it did not go to that excess in the employment of certain means of treatment to which some of the succeeding centuries unfortunately did. Columbus' medical contemporaries corrected the Arabian abuse of polypharmacy, which had a tendency to manifest itself over and over again during the later Middle Ages in spite of the well directed efforts of thoughtful physicians to suppress it. The diffusion of a knowledge of the classic authors in medicine did more than anything else to secure its eradication at this time. Physicians used bleeding, but not in every case, as came to be the custom later, and not to the excess in which it was employed at the end of the eighteenth and the beginning of the nineteenth century. Poor Mirabeau, the orator of the French Revolution, under the best French skilled care a century ago, was bled some eighty ounces in the course of forty-eight hours. Under the impetus given by Basil Valentine's "Triumphant Chariot of Antimony" they used antimony frequently, but not at all to the extent that it was employed in the eighteenth century. Purgatives were much more abused in the later seventeenth and eighteenth centuries than during Columbus' Century. Under the immediate influence of the Greeks the physicians of this time were thoroughly conservative, and there is as little of regrettable therapeutics to be chronicled as at any time in the world's history.

Jerome Cardan of this time is one of the geniuses of the history of science whose career is extremely difficult to understand. His mixture of credulity with a genuine scientific temper of mind that tests everything by experiment, combined with his wonderful ability in mathematics, adds to the difficulty of understanding him. He was a great believer in dreams but then that was because he was sure that so many of his own dreams had come true. He was a serious student of all the borderland subjects between spirit and matter and constituted a Psychic Research Society in himself, but with the tendency to accept the marvellous on general principles. He heard that instruments which had been magnetized could be used for surgical operations without producing pain and having tried some experiments in the matter he announced this as a great discovery. He was sure that he had the power to magnetize others in such a way as to prevent pain, but, after all, it must not be forgotten that in these he only imitated what has attracted much attention at many times in the history of medicine and electricity. As the publisher of the formula for cubic equations he has a distinguished place in mathematics, and he was looked upon as one of the great thinkers of his time. His contributions to medicine, and the estimation he secured for the profession by his popularity among the great ones of Europe at this time, have made his life most interesting to our generation.

Cardan's almost infantile absurdities have sometimes been cited as indicating a lack of the critical scientific spirit at this time. Anyone who recalls, however, the attitude of mind of some of the most prominent scientists of our time towards certain questions, as, for instance, vaccination, spiritism, and even phrenology and other psychic subjects, will not be likely to accept any criterion of lack of the critical faculty that might be set up arbitrarily, because a scientist exhibited a tendency to accept some things without as absolute proof as other men demand. Nearly all the great scientists had certain peculiarities in this regard and Cardan is only an exaggeration of this tendency. His absurdities have sometimes been quoted as if they represented common opinions of the learned men of this time and exhibited their lack of critical judgment, but no one has scored Cardan's absurd opinions more severely, nor called attention more emphatically to the fact that this great scientific genius accepted some childish trivialities, than his contemporary, Scaliger, who so often entered into controversies with him.

An instructive contrast to some of Cardan's absurdities is a little book that has been a classic ever since in popular medicine, Louis Cornaro's "Means of Obtaining a Long and Healthy Life," which was published at this time (Padua, 1558). Editions of it have been issued in nearly every generation since. Cornaro, to give a sentence or two from Addison's essay on the volume "was of an infirm constitution till about forty, when by obstinately persisting in the Rules recommended in this Book, he recovered a perfect state of health, insomuch, that at four-score he published this Treatise. He lived to give a fourth edition of it, and after having passed his hundredth year, died without pain or agony, like one who falls asleep. This Book is highly extolled by many eminent authors, and is written with such a spirit of cheerfulness and good sense, as are the natural concomitants of temperance and virtue."

The little book insists very much on temperance in eating and drinking and is quite as sensible in its way as any popular book on medicine ever written. It is a living proof that in spite of the popular medical delusions of many kinds so frequent in this period, though not more frequent than they are in our own, men of sense could view the question of right living from the proper standpoint and give good advice with regard to it. In the preface to the latest American edition (New York, 1912) the publisher said: "The methods followed by Cornaro and the recommendations and suggestions submitted by him can be compared to advantage with the teachings of authorities of the present day, such as Metchnikoff. The book is now presented to the American public, not only as a literary and scientific curiosity, but as a manual of practical instruction."*

It is interesting to bring together some of the sanitary regulations of this period because it is often presumed that it is only in our time that public care of the health has come to be recognized as a duty of the civil authorities. Wickersheimer in his "Medicine and Physicians in France, at the Time of the Renaissance," * has gathered a number of the details. It was forbidden butchers in Paris to keep meat for sale more than two days in winter or thirty-six hours in summer. Hotel keepers were not allowed to kill their own meat because, as they could cook it before selling it, it was easy for them to "dissimulate bad meats." Restaurateurs were forbidden to serve meat which had been warmed over or warmed-over soup or vegetables. Fish was guarded particularly by detailed regulations and heavy fines were inflicted for its sale, except under conditions that must have assured its absolute freshness. Butter and fish could not be sold in the same shop. It was forbidden to put coloring matter in butter, no matter what the form of color material used, and also to mix old butter with new. The sellers of spices were required by Louis XII to watch over the absolute cleanness of their mustard mills and to employ as workmen only those who were clean and in good health. Similar regulations existed for the bakers. In a word, they anticipated in many ways the pure food laws of our time. Unfortunately these regulations were allowed to fall into abeyance during the neglect of social order that characterized the notable degeneration of the eighteenth and earlier nineteenth centuries.

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* The first American edition, annotated by Mason L. Weems (Philadelphia, 1809), had with what might be thought characteristic American enterprise Benjamin Franklin's "Way to Wealth" as an Appendix.

* "*La Médicine et Les Médecins en France à l'Époque de la Renaissance,*" Paris: Thesis 1905.

Some of the popular hygiene of the time is very interesting and distinctly foreshadows practices of our own time. Erasmus gave directions to students for cleanliness. The hands were to be washed after each meal; a practice rendered necessary by the absence of forks and the nails were to be cut and cleaned every week. Gums and teeth were to be rubbed with a rough towel every day according to Montaigne, and various tooth powders were commonly employed. The feet and the hair ought to be washed at least once a week. Among foods, sea-fish were preferred to river fish and the livelier the fish the better it was liked. Shellfish were recommended by some and deprecated by others. Lobsters were usually counted difficult of digestion, and oysters and other shellfish shared in this prejudice. Popular traditions as to food were quite like our own. Peas were very much praised as an article of diet, spinach was considered to be good for torpid liver, water cress was said to have a favorable action on the bowels and lettuce as well as most of the material for green salads was declared to be sedative in action. Cucumbers were indigestible unless cooked, melons must be ripe and soft and without any spots in them or they were dangerous, and cabbage and onions were praised or blamed as articles of food according to the particular part of the country from which one came.

Even in the matter of drinks opinions were not so different from those which are held at the present time, though there was just as much disagreement as regards their effects as we are accustomed to. In Normandy, where apples were common and cider a familiar drink, cider was considered to be much better for men than wine. In the middle and South of France, however, wine was considered of the greatest value for health, and white wine was considered to be diuretic while red wine was recommended for diarrheic conditions. Wine was declared to be much more wholesome as a drink than water and there is no doubt at all that in this our colleagues of that time were eminently justified by their observations. Any water in the neighborhood of cities or considerable centres of population was almost sure to be contaminated by sewage of some description and to be distinctly dangerous. Wine was ever so much less likely to be followed by disease than water. There were many who recognized how much of evil was done by the abuse of wine however, and Renou declared that in that century wine had killed many more people than the sword. He declared that the abuse of wine led to degenerations of the brain and the liver, disturbances of the nerves, brought on tremors, convulsions, even paralysis, and was active in the production of dyspnœa and other serious conditions.

Dr. Cramer calls attention * to the fact that in 1481 the republic of Lucca in Italy elected three citizens to serve as a board of health. They were given plenary powers to act in case of epidemics. Their main purpose was to prevent the spread of infectious diseases. For this purpose they kept in touch with other countries, so as to be forewarned of places where epidemics were raging, and they had the right to forbid entrance into Lucca of persons, animals or goods until after a sufficient delay to insure the absence of infection or thorough disinfection. The word quarantine of course is very old, though often the idea is supposed to be new, and there seems no doubt that in most of the Italian cities health boards and health regulations anticipating many supposedly modern developments were in existence. There is even question of

* *Revue Médicale de la Suisse Romaine*, 1914, XXIX, No. 1.

the contagiousness of tuberculosis having been recognized at this time, and measures taken to prevent its spread. We know that scarcely more than a century after Columbus' period every principality in Italy has laws declaring tuberculosis contagious and regulating it.

Sir Thomas More in his "Utopia" has a very curiously interesting paragraph with regard to the status of physicians in his ideal Republic, which shows what his own idea of the place of medicine in the world is. His long friendship with Linacre might very well have been expected to give him such a high estimation of the physician. It is all the more interesting because he expresses depreciation of his own profession of the law in "Utopia." What is striking in this passage is his recognition of the lofty place that medicine deserves to hold in the intellectual world as a department of philosophy and science. He emphasizes the fact that the less people need physicians the more they appreciate them, thus anticipating the modern idea that prevention rather than cure is the great basis for prestige in medical science. His fine tribute to the honor that medicine should have in the estimation of men will make his words a fitting close to this chapter on medicine in Columbus' Century.

"One of my companions, Thricius Apinatus, happened to carry with him some of Hippocrates' works and Galen's 'Microtechne,' which they hold in great estimation, for though there is no nation in the world that need physic so little as they do, yet there is not any that honors it so much; they reckon the knowledge of it one of the most pleasantest and profitable parts of philosophy, by which as they search into the secrets of nature, so they not only find this study highly agreeable, but think that such inquiries are very acceptable to the Author of nature; and imagine, that as He, like the inventors of curious engines amongst mankind, has exposed this great machine of the universe to the view of the only creatures capable of contemplating it, so an exact and curious observer, who admires His workmanship, is much more acceptable to Him than one of the herd, who, like a beast incapable of reason, looks on this glorious scene with the eyes of a dull and unconcerned spectator."

CHAPTER XIII

SURGERY

Ordinarily it is assumed that surgery has received almost its only and its greatest development in our time. Probably no development of knowledge that has come to us in the recent revival of interest in the history of medicine has been more surprising than the finding that surgery had several periods of great progress before our time. One of these and the most important came during the thirteenth and fourteenth centuries. Another great phase of surgical advance, after a period of decline such as seems inevitable in all human affairs, occurred during the Renaissance. It had its origin in or at least was greatly influenced by the publication of the chapters on surgery in the Latin and Greek classics, though strange as that may sound to modern ears even more was probably accomplished for surgical development by the printing of the text-books of the later mediæval surgeons. The new impetus thus given affected nearly every phase of surgery and accomplished ever so much more than we would be likely to think possible, only that the republication of old surgical text-books in recent years has proved such a revelation to us.

As I have said in preceding chapters, one of the greatest debts of the modern time to the Renaissance is due for the printing of old books in the early days of printing. Scholars were willing to give liberally of their time and to devote patient labor to secure a good text for the printers, and somehow or other great printers succeeded in bringing out usually in magnificent editions, though of small size as regards the number of copies, not only the ancient but what we have now come to recognize as the mediæval classics of medicine and surgery. The chapters on surgery in such writers as Aëtius, Alexander of Tralles and the Arab writers like Abulcassis are among the most important contributions to the medicine of their time. The text-books on surgery of such men as Theodoric, Hugo of Lucca, the Four Masters, William of Salicet and Guy de Chauliac are landmarks in the history of a great surgical era. All of these were reprinted usually in magnificent editions during Columbus' Century. Without such reprinting at a cost of time and money that we can scarcely understand, many of these precious treasures of the history of medicine and surgery would almost surely have been lost. Certainly very few of them would have remained in the manuscript forms in which they then existed and at most, only in seriously mutilated conditions. There have been several centuries since when they would have been utterly neglected, for almost no hint of their value survived and there was an impression prevalent that no one knew anything either about medicine or surgery during the Middle Ages at all worthy of preservation.

This publication of the old text-books gave an impetus to the surgeons of the time that brought about a great new era in surgery, though there were other important factors at work in producing this. Above all the development of anatomy made for a corresponding development in surgery and by increasing men's knowledge of the tissues through which operations had to be made, added to their confidence and decreased the mortality of surgical intervention. The magnificent hospitals of the time are of themselves the best possible evidence of proper care for patients, not alone in a medical, but also surgical way. It cannot be too often repeated that whenever hospitals are well built, properly cared for and suitably maintained, there is sure to be good medical practice and a fine development of surgery; whenever hospitals are neglected, medical and surgical practice both sink to a very low standard. Hospital construction reached a very high plane during the Renaissance period, only to sink afterwards, as did every other constructive effort for humanitarian purposes, to what Jacobsohn, the German historian of hospitals and care for the ailing, calls an indescribable level of degradation. Literally, the worst hospitals in the world's history were erected at the end of the eighteenth and the beginning of the nineteenth century. Hospital organization and maintenance inevitably sank in the same way. A corresponding decadence in medical and surgical practice could not help but occur,—fortunately to be followed by the progress of our own time. There are many, however, who seem to think that because the twentieth century is so far ahead of the early nineteenth it must be correspondingly in advance of preceding centuries. This assumption constitutes the most important reason for the very common failure in our time to understand properly the history of medicine and surgery as well, indeed, as that of every phase of science.

This was the period when gunpowder began to be used extensively in the operations of war and it is not surprising that a great deal of attention was given to gunshot surgery. We have four books, treatises in their way on gunshot wounds, that were written at this time by men of large experience. They made mistakes of course, there is no period in the world's history, even our own, when men have not made mistakes, but the surgeons of Columbus' Century accumulated an immense number of observations and gradually worked out a rather valuable set of suggestions with regard to the treatment of various kinds of wounds. At the beginning of the century they made the mistake of thinking that bullets caused both poisoned and burned wounds, and they were over-anxious to treat these imaginary consequences rather than the mechanical effects produced in their passage. They gradually worked out their problems however, even using experiment in order to show the effects of wounds. Braunschweig, Felix Würtz, De Vigo and Ferri are the classics of the time on gunshot wounds and their books have probably been more read in our generation than in any other since the end of the sixteenth century. Nothing is indeed more surprising than the recognition of the value of the observations made by these old-time surgeons which has come in the last twenty years.

The greatest of the surgeons of Columbus' Century is the Frenchman, Ambroise Paré, who has come to be spoken of as the Father of Modern Surgery. He well deserves the title if we restrict it definitely to the modern time and do not conclude, as so many do, that there had been no surgery since the classical period, for, of course, there was a very great era of surgery during the thirteenth and fourteenth centuries, but as is the way with humanity a period of decadence occurred, followed by another upward phase in the curve of history of which in his time Paré is the apex.

It is to him that we owe the treatment of gunshot wounds by simple water dressings, or at most by aromatics. When he began his work they were treating gunshot wounds as if they were poisoned and burned wounds by pouring boiling oil along the track of the bullet. Paré ran out of oil on an historical occasion but found that the wounded left untreated recovered with less pain and complications than those subjected to the heroic remedy. He recognized the mistake and had the genius to correct it properly. He reinvented the ligature, though, of course, it had been in use a number of times before and had gone out because of the tendency to produce sepsis involved in it, and because so often secondary hemorrhage occurred from the coming away of the ligature in the suppuration which ensued. He deserves, as do several others, the credit of real invention in its use. Paré himself speaks of this discovery, which he made just at the close of Columbus' Century, as an inspiration which came to him through Divine Grace.

In nearly every department of surgery Paré left his mark. He was a thoroughly practical surgeon. He suggested, as did also Maggi, the Italian surgeon at this time, exarticulation as an important mode of amputation. This consisted of the removal of an injured limb or a gangrenous member at the joint just above, because in this way there was less danger of complications and a better stump could be obtained for subsequent use. In order to demonstrate that gunshots did not make a burned wound he demonstrated that when balls are fired even into a bag of gunpowder it does not explode. Maggi* independently made this same observation but went further and showed also that shot do not melt when they strike a hard surface and that balls of wax that are fired do not spread out

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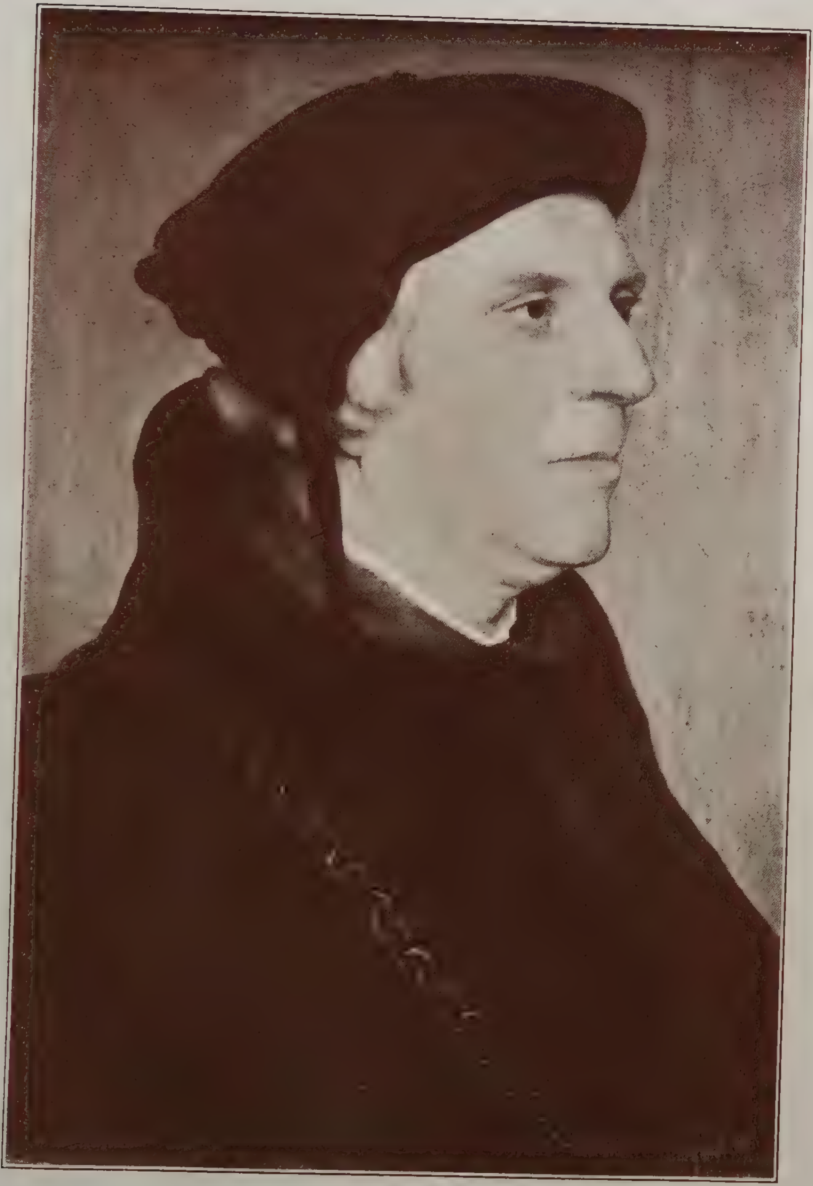
* Anyone who doubts the ability of the men of this time to discuss a practical scientific question from a thoroughly scientific standpoint with experimental demonstrations and close reasoning, should read Gurlt's account of Maggi's experiments with gunshot, and the German surgeon's comparison of the conclusions of this colleague of the early sixteenth century with the facts brought out by the discussion of the same subject after the Franco-German War of 1871 and the experiments which were made just afterwards along the same line.



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as if the wax were melted. This series of experiments made to demonstrate certain valuable points in gunshot surgery is quite worthy of the most modern time and indicates well the thoroughly scientific spirit that was abroad at this period. Paré also suggested that cut tendons should be sewed, the ends being carefully brought together and that no portion of the tongue should be removed after injury, but the parts should be brought together, for there was great power of healing in this organ. He advised the cutting of the uvula with a ligature gradually made tighter and he, as well as Franco, devised an apparatus to fill up the cleft in the bone of a defective palate and other similar mechanical appliances.

Indeed from the mechanical side of surgery Paré is the most interesting. Orthopedics, that is the treatment mechanical and surgical of deformed children, in order to bring about their cure or at least the lessening of their deformity, is generally supposed to be new, but there are many suggestions for it in the Renaissance period. Helferich in his "*Geschichte der Chirurgie*" in Puschmann's "*Handbuch,*" says, for instance, that Paré's orthopedic armamentarium was rather extensive. He used various apparatus and specially designed shoes with bandages in order to bring on the over-correction of club foot. He treated flat foot in various ways and particularly by the use of special shoes. He invented a corset with holes in it for ventilation to be worn for various torsions of the spine and other spinal deformities. He and Fallopius taught the value of resections for joint troubles of various kinds and even for deformities. Paré declared that *genu valgum,* that is knock-knees, were due to similar causes as those which produced club foot, or at least that the affections were related.

A very interesting incident in his experience is related by Paré in his memoirs with regard to one of these surprising cases of deep injury to the brain which seem inevitably fatal, yet the patient survives. It is, as suggested by Dr. Mumford, a replica of the well-known Harvard crowbar case, the most famous in American surgery, in which a quarry man recovered from his injury in spite of the fact that a tamping iron had passed completely through his head from beneath the chin upwards, coming out through the top of the skull. The specimens from the case, secured long afterwards at the time of the man's death, may still be seen in the Harvard Museum. Paré's case was very similar but concerns a very important individual. Francis of Lorraine, Duke of Guise, was wounded before Boulogne, "with a thrust of a lance, which entered above the right eye, towards the nose, and passed out on the other side between the ear and the back of the neck, with so great a violence that the head of the lance, with a piece of wood, was broken and remained fast; so that it could not be drawn out save with extreme force with smith's pincers. Yet, notwithstanding the violence of the blow, which was not without fracture of bones, nerves, veins and arteries, and other parts torn and broken, my lord, by the grace of God, was healed." Without the corroboration of the possibility of this by our modern case, it is probable that there would be serious doubts as to it.

The bone surgery of the Renaissance period is particularly interesting. Fallopius declared for the preservation of the periosteum of the bone just as far as was possible whenever there was bone disease or injury. We know now that the periosteum in healthy condition will bring about regeneration of bone, and it was evidently because of clinical observation of the satisfactory improvement that occurred in cases when the periosteum was interfered with just as little as possible that brought Fallopius to this conclusion. Their treatment of fractures was excellent and they secured good results. It was during this time that the older methods of using force in the reduction of dislocations yielded to the maxim that joints should be restored along the same path through which the dislocation took place. A series of surgeons at this time, notably Massa, Ingrassias and Vigo, wrote about spinal disease, describing "penetrating corruption" of the spine, persistent suppuration and the subsequent deformity, using the term "*ventositas spinæ,*" and others that would indicate their interest in what we know as Pott's Disease. Vigo described fractures of the inner table of the skull when the outer table is unbroken, and Argelata described depression without fracture as occurring in young folks.

Considerable valuable advance was made in the treatment of fractures of the skull and injuries of the brain. Vigo brought back the use of the crown trephine and did much to make the instrument popular. A great many surgeons invented a variety of instruments for lifting up depressed bone, or for removing fragments, and each one was sure that his particular type of instrument was the best to use. It is interesting to read Helferich's "History of Surgery" in Puschmann's "*Handbuch*," on these and other points, because they are arranged in the order in which the discoveries and rediscoveries and inventions and reinventions were made. The Renaissance is particularly full of interesting surgical history. The late effects of brain injury, dementia, deafness and various forms of paralyses were carefully studied by such men as Fallopius, Paré and Della Croce.

Various phases of surgery were taken up and discussed that are often supposed to be much more modern. The whole question of the transfusion of blood, for instance, attracted wide attention at this time. Magnus Pegelius of Rostock suggested that the artery of one patient should be fastened directly to the artery of another patient in order to bring about transfusion. The use of this method of treatment, after large losses of blood or in case of anæmia, is mentioned by a number of men. At least as much was hoped for from it as in our time from opotherapy. Jerome Cardan went farther than any in what he looked for from the transfusion of blood. He always saw the possibility of mystical results and his suggestion was that the transfusion of blood might bring about a change in the morals of individuals. It was even said that the use of animal's blood in the same way might bring about an endowment of the human individual with certain animal qualities of disposition. This is quite as absurd yet quite as reasonable as many of our surgical attempts at the reform of criminals by operation on their brains. In 1539 Benedictus noted the occurrence of hemophilia or bleeders' disease. This had been noticed before in the Middle Ages, but had been lost sight of.

With regard to varicose veins the Renaissance abandoned the older methods of operation and suggested the use of bandages. Savonarola, the grandfather of Savonarola the Dominican, who was burnt to death in Florence, described various forms of bandages and suggested rest in the prone position with the feet higher than the head for the relief of discomfort. Savonarola was much interested in the correction of deformities and classifies rather carefully the different forms of gibbosity of the spine, forward, backward and to the side, and suggests their treatment with bandages that may be put on when soft and pliable, but which harden after their application. Paré at the end of the century used a corset made of very thin perforated iron plates which he insisted should be well padded. This should be changed every three months and its shape often altered so as to suit the growth of the body and the changes brought about by itself.

Some of the developments of surgical technique at this time are extremely interesting because they illustrate that accurate attention to detail and inventive ability in surgery that is usually supposed to be reserved for a much later time. Paré, for instance, invented a whole series of special apparatus for nearly every phase of corrective surgery, many of which have been mentioned. Fallopius insisted on bringing the muscles of the neck together and retaining them in position by sutures whenever they were severed, because results were nearly always excellent and function was restored. Every important surgeon of the time emphasized the sewing of severed tendons. Vidus Vidius invented a gold or silver tube to be used after tracheotomy in order to permit breathing through it, and suggested the use of this instrument also after injuries of the larynx. Monteux devised a magnet to aid in the extraction of swallowed iron objects that were caught in the throat.

All the specialties developed wonderfully at this time. The story of the Cæsarean operation attests the evolution of obstetrics. In 1500 Jacob Nufer, a veterinarian, performed this operation successfully on his own wife, and a number of others followed the example until within twenty-five years after the close of our period, Rousset counts up his cases of the operation as 15. Gynæcology and obstetrics always develop together, and Weyer, the Dutch physician and surgeon, who did so much to rid the world of the witchcraft delusion and point out its connection with what we know as hysterical manifestations, wrote a text-book on gynæcology, and Caspar

Wolff laid the deep foundations of the science of gynæcology at this time. Würtz, who comes after our period, but was deeply influenced by it, and who must indeed be considered as a follower of Paracelsus, insisted very much on the simple treatment of wounds and emphatically opposed the common custom of "thrusting clouts and rags, balsam, oil and salve into them." Such teaching would have much to do with making advances in gynæcology and obstetrics possible.

Cabrol advised the removal of the breast for cancer and insisted on its complete removal and also of a part of the pectoral muscle, if that seemed to the operator to be necessary, because of actual or apparent involvement. Cabrol also declared that wounds of the heart were not necessarily fatal and gives the details of one which he himself had treated and had afterwards seen at autopsy, death having taken place from another condition. He mentions the fact that stags' hearts had been found in which there were definite indications of healed wounds so that the long-time tradition as to the fatality of heart wounds is not absolute. Della Croce taught that blood or pus or other fluid should be emptied out of the thorax by aspiration. He suggested the use of a cupping glass or a syringe, or in case of necessity even of the mouth for this purpose. He advised the placing of a metal tube in the thorax for drainage purposes. Arculanus advised the opening of empyemata by a perforation of the thorax that would permit drainage. If one had opened spontaneously and become chronic, a lower opening for better drainage should be made.

Nor were they less ingenious in their suggestions as to surgical intervention in conditions within the abdomen. Riolanus explained ileus as thoroughly as anyone has ever done it and recognized exactly what the condition was and the only way by which it could be treated. Paré advised the letting out of gas from over-distended intestines when these could not easily be returned to the abdomen. Fioravanti reported a case of splenectomy with the recovery of the patient. All sorts of bougies for strictures were invented, and many suggestions as to instrumental relief in difficult strictures made.

Savonarola suggested the extirpation of *ranula,* evidently after having had the experience that the mere emptying of this cyst of the gland beneath the tongue is practically always followed by the refilling of it. He gave the technique of puncture for ascites and has some interesting details of cases, including one in which a fall led to the traumatic evacuation of the fluid with subsequent cure. He recommended the puncture of the pleural cavity for pleural effusion, and above all for empyema whenever the case was in serious condition. A little bit later, Berengar of Carpi, who is usually considered much more important in anatomy than in surgery, discussed the question of fracture of the skull by *contrecoup*, evidently after considerable experience. He detailed some cases of *extirpatio uteri* for procidentia and developed the technique of inunctions of mercury for lues. Whether he was the first to do this or not we are not sure. There is no doubt that his practice attracted wide attention. He was visited by patients from all over the world and was summoned on consultations even to great distances in order to see members of the nobility. There probably never has been a more important discovery in therapeutics than the use of mercury for specific disease, and the men of this time to whom must be attributed the development of this phase of therapeutics deserve the highest praise. It required the most careful, patient, prolonged observation, and this was successfully given.

While gunshot wounds were becoming so frequent as to claim much attention, wounds from swords and other sharp instruments causing ugly disfigurements were rather common. Cosmetic surgery attracted attention. It might be thought that owing to their ignorance of aseptic surgery there would be no possibility of any great development of plastic surgery at this time. As a matter of fact, however, not a little was done that was of great significance for the correction of disfigurements due to injury and unsightly congenital defects or scars after disease. A number of procedures for the correction of harelip and of cleft palate have already been noted. Just at the beginning of Columbus' Century the technique of the Brancas, father and son, for the restoration of noses that had been lost by injury or disease attracted wide attention. Their method was to make the new nose from the skin of the arm, lifting a flap from the inner portion of the upper arm, fastening it to the forehead and bandaging the hand firmly on top of the head so as to keep the flap in place, fed by the circulation of the arm until it had obtained a firm hold, when the attachment to the arm was cut and the nose fashioned from the living tissue thus obtained. Vianeo and Aranzi both described methods of forming the nose, and it was suggested that a portion of the skin of the forehead might be used for that purpose. Defects of the lips and eyelids were cured by slipping tissues over and by freshening the edges and bringing them together.

An extremely interesting surgical writer of the beginning of the sixteenth century is Michele Angelo Biondo, sometimes known by his Latin name of Blondus. There are some passages in his writings with regard to the use of warm water as the only proper dressing for wounds that are rather startling. He tells of some physicians of his time who, in place of liniments and all the various applications that are made by the "wax-dealers," simply wash off their wounds with warm water. He adds that these physicians insist that a great many surgical patients are not killed by their disease so much as by the custom of allowing them only small amounts of food and the unfortunate effect produced on them by the applications to their wounds. He adds further that these men are not wont to treat patients suffering from fevers by keeping them on a light diet, but on the contrary they give them wine and nourishing food instead of slops (ptisans). His comment is that this sensible method of supporting treatment unfortunately does not make much headway in the profession. Apparently it was too simple and natural to appeal to the physician of the time. He adds with fine irony, "It is said to be preferable to die methodically than to live empirically."

Gurlt in his "*Geschichte der Chirurgie*" (Berlin, 1898), to whom I owe most of what is here said of the work of these old surgeons, gives some further details of Biondo's treatment of wounds. After the staunching of the bleeding, the wound was to be cleansed and then covered with *oleum abjetinum,* very probably oil of turpentine, one part to two parts of oil of roses. With regard to the use of water in the treatment of wounds, Biondo said: "The most experienced of the older physicians held water in such dread that they would scarcely use it in removing dirt from the neighborhood of wounds. I myself, however, having seen the wonderful effect of water in wounded parts, cannot help but be amazed at its supercelestial virtue." In spite of this strong declaration, Biondo in his book gives chapters on all the old methods of treating wounds and the various applications that were supposed to work wonders in bringing about healing. The consequence was that the water doctrine was pushed into the background and probably attracted very little attention. Here was the germ of a great discovery, the use of boiled water, evidently with some experience behind it, and yet it was to remain untried, its true value unappreciated until four centuries later.

Paracelsus, who brought about the revolution in medicine at this time, worked almost as great a change with regard to surgery. At least the principles that he laid down were as startlingly different from much of those accepted in his time and strikingly like those we have come to accept in our time. He insisted that to as great an extent as possible wounds should be left to nature, for there was a definite tendency to cure. He inveighed strongly against meddlesome surgery and declared that not a little of the subsequent complications in wounds were due to misdirected efforts at cure of them. He talked about *pestilence* due to wounds, and declared that he had seen it spread epidemically from one patient to another in hospital wards. He discussed pyæmia as *Wundsucht,* that is, an infectious disease produced from a wound. Paracelsus described gangrene and proclaimed its epidemic character. He is the first from whom we have a careful study of the effects of lightning and almost the first who believed that it was possible for a man to be struck by lightning and yet not be killed or even fatally injured.

In general, the ideas of this time were not nearly so distant from our own as some of the intermediate periods have been. Fallopius described union by first intention as resembling that which occurred between two waxed surfaces when they were brought together in parallel lines and adhered. Würtz described a wound fever, evidently erysipelas, and warned about the possibility of its becoming epidemic.

Arceo, known also by his Latin name of Francisco Arceus, a Spanish surgeon, born near the end of the fifteenth century, illustrates the vitality of surgery in Spain at this time. He has a number of interesting surgical suggestions and has this to say with regard to club foot. The foot should be soaked thoroughly for thirty days in warm water in which some cereal has been cooked. Then the surgeon, taking the lame foot, should exert all his force to put it back into its due position and the form that he desires. This can usually be accomplished without difficulty or delay, partly because of the preceding softening of the tissues, but above all because of the tender age and soft tissues of the child. Then a bandage should be used to maintain the foot in this position until the correction becomes permanent. Ambroise Paré, as I have said, accomplished similar results, but he also used a number of forms of apparatus for the cure of club foot and for the prevention of contractures in the joints as a consequence of paralysis. He is the first surgeon whom we know to have interested himself in artificial hands, arms and legs for those deprived by amputation of members and the first to employ artificial eyes. Fabricius of Aquapendente, born in Columbus' period, but doing his work afterwards, recommends massage and bandaging for *pes varus* and an iron shoe with side pieces for *pes valgus.* He made the correction gradual. He said, "I talk from experience, as I have had much to do with crooked legs, feet and backs and have made them straight and proper."

That Germany was not without the distinctive spirit of the time by thoughtful work in surgery is made clear through the writings of Hugo von Pfolspeundt, which were found only a few years ago. In what relates to the mechanics of surgery he made many practical suggestions and inventions. For harelip he suggested that stitches should be placed on the mucous surface as well as on the skin surface, after the edges of the cleft had been freshened in order to be brought closely together and held in coaptation. He also suggested the use of a permanent weight extension for fractures and for certain injuries of the joints. Perhaps his most interesting surgical development for us is a description of a silver tube with flanges to be inserted in the intestines when there were large wounds, or when the intestines had been severed, the ends being brought together carefully over the tube which was allowed to remain in situ. Pfolspeundt said that he had often seen these tubes used and the patient live for many years afterwards. This is an early form of what is known as the Murphy button in our time, though it was not the first suggestion of a mechanical device to aid the repair of intestinal injuries. One of the latest mediæval surgeons had employed the trachea of an animal as the tube over which the wounded intestines were brought together. This became disintegrated after a while in the secretions, but remained intact until after thorough agglutination of the intestines had occurred.

Pfolspeundt was not an educated man and did not even write his own German tongue with correctness, not to say elegance. He was just a practical devotee of surgery, probably not even a regularly practising physician, and yet his writings show how much there was that he knew of technical details, extremely important for surgical practice, that are usually supposed to be of much later origin. After all, some of our own distinguished surgeons have not been educated men in any sense of the word, and there has sometimes been the feeling that a surplus of information of what had been accomplished just before his time, sometimes deterred the physician, as well as the surgeon, from thinking independently about problems connected with practice and reaching valuable practical conclusions.

Besides Pfolspeundt there are at least two other German surgeons of this time whose writings have come down to us that deserve a place in a history of distinguished accomplishment in Columbus' Century. One of these is Jerome of Brunschwig, whose name is spelled in many different ways, and the other is Hans von Gerssdorff. Brunschwig, or Braunschweig, used to be considered the oldest writer on surgery in German until the comparatively recent discovery of Hugo von Pfolspeundt's manuscript. He published his surgery in 1497, and it went through nine editions in a few years. It contains a number of woodcuts, and these probably helped to give it its popularity.

Brunschwig was very proud of his calling as a surgeon, and quotes what Galen, Rhazes, Abulcassis, Lanfranc and Guy de Chauliac had declared should be the qualities possessed by a surgeon and insisted particularly that he " should have deep knowledge and trained observation of anatomy, so that whenever it may be necessary to cut or cauterize, he shall know exactly in what regions to do it, so as to do just as little damage as possible and that he shall be capable of diagnosing joint conditions and know what important organs may be injured by bullet or other wounds with weapons and be able to judge of the danger of cutting down for their removal." He recommends above all that the young surgeon should invariably call an older and more experienced colleague, or even two, in consultation, if the case is very difficult, and he has doubts about it.

Some of his details of technique are very interesting as showing how carefully he thought out even minor problems connected with the practice of surgery. For instance, he says as to wounds of the face, that as " the beauty of the countenance is what above every other thing makes men beautiful, the surgeon must take the greatest care that no ill-looking or ugly union should take place in it, and just as far as possible the parts should be brought together and kept in apposition, with as delicate means as possible, until healing has taken place."

On the other hand he does not hesitate to discuss even fractures of the breast-bone, and says that if the patient expectorates blood it is a bad sign, for almost surely some of the arteries lying under the bone have been ruptured. He suggests position to help in the correction of deformity and displacement of the bone, and mentions that some of the older surgeons sought to raise it up by means of large dry cups. In fractures of the ribs similar recommendations were made, but Brunschwig was of the opinion that they did more harm than good. He recommended bandages, thickened with albumen, or leather moulded to the part, and he covered the thorax with a large binder.

There is no doubt at all that he knew very well the books of his predecessors and that he had thoughtfully adapted them in the way that had been taught him by his forty years of experience. He begins his book with a dedication to the praise of God and His Mother, not forgetting the honorable magistrates of the city of Strassburg. He says in the preface that he is tempted to write his book because there are many young, inexpert masters of surgery in the care of wounds who do not understand it and consequently inflict much harm on mankind. He hopes to be able to instruct them and also others who, living in the smaller towns and villages, have not had the opportunity to see the practice of surgery and yet must be able to help the ailing and injured. The picture of the position of the surgeon of the time is rather interesting.

The next of the German surgeons of this period was Hans von Gerssdorff, who practised in Strassburg. His well-known work is the " Field Book of Surgery," in which he gives some of the experiences of long years as a military and municipal physician. The book was issued with a series of woodcuts, some of them anatomical but most of them surgical in interest, which are very well executed. His illustration of an amputation is the first one of this subject ever made, and there are many pictures of his instruments. We have only room to note some of his discussions of subjects usually not supposed to be thought of in his time. He discusses wounds of the liver, especially such as occur from large wounds of the abdomen, and says that if the liver substance itself has been wounded the issue will surely be fatal. If the liver is not wounded, yet appears in the wound, it should be replaced and the external wounds sewed. His discussions of wounds of the deep organs are all in about this same conservative strain.

Gerssdorff has much to say with regard to contractures and anchyloses. When these deformities are to be corrected, the tissues around the joints should be softened by means of embrocations and the rubbing in of old oil, and the contractures gradually overcome by manipulation or by instrumental means. He invented a number of apparatus for stretching such contractures, and four of the large pictures reproduce them. They are partly in the shape of armor or splints so arranged that they can be bent or made straight by means of a screw. There is also a screw arrangement for bringing about extension in various directions. He did not believe very much in going too slowly about the correction, for he declares that most of the contractures and anchyloses can be overcome in a few hours.

In discussing amputations he mentions the use of anæsthetics by the older surgeons, and quotes from Guy de Chauliac the method of anæsthesia employed by him, but he thinks that better results are obtained without the use of such material. He had never employed anæsthetics himself, though he had performed over 100 amputations. Perhaps his Teutonic people were able to stand pain better than the patients of the Latin countries. The refusal to use anæsthetics is very interesting at this time, for the practice gradually disappeared and was forgotten. Gerssdorff warns particularly against the use of opium alone as a means of preventing pain, and Chauliac had done the same thing earlier.

The spirit that the surgeons of the time were expected to have is very well illustrated by a passage from John Hall, written shortly after the close of Columbus' Century in his "Historiall Expostulation," which is referred to more at length in the chapter on Medicine. He said, "I would therefore that all Chirurgiens should be learned, so would I have no man think himself learned otherwise than chiefly by experience, for learning in Chirurgery consisteth not in speculation only, nor in practice only, but in speculation well practised by experience."

Dr. Hall made a series of rhyming verses which were meant to be helpful to the young surgeon to enable him to recall his duties readily. He urged him above all never to treat a case unless he understood it, when in doubt to call in a consultant and advises him after consultation to console the patient, but to talk seriously to some of the patient's friends. Above all not to disturb the patient's feelings. Among other excellent bits of good advice he insists very much on the knowledge of anatomy, and two of his rhyming stanzas regarding it seem worth while quoting to show the spirit in which he wrote:

"He is no true chirurgien
That cannot show by arte
The nature of every member
Each from other apart.

For in that noble handy work
There doth nothing excell
The knowledge of anatomy
If it be learned well."

In a chapter of this kind, almost needless to say, it is impossible to give any formal account of the surgery of the time. All that I have been able to do is to point out that in every country in Europe surgeons were thinking for themselves and facing most of our modern surgical problems and finding not inept solutions. There is scarcely a phase of our modern surgery from antisepsis and anæsthesia to technical details of various kinds, through plastic surgery, the use of apparatus, manipulation and many forms of instruments, which cannot be found in the surgical text-books of this time. Gurlt in his great "History of Surgery" has taken some 400 pages of a large octavo volume, with the excerpts in rather small type, to tell the story of the surgery of Columbus' Century. Helferich occupies several hundred pages of Puschmann's "Handbook of the History of Medicine" with the details of what was done by the period's surgeons. The specialties developed, and in all of them important contributions were made. The great independent, seeking temper of the era is as noteworthy in surgery as it is in every other department of intellectual effort at this time.

BOOK III

THE BOOK OF THE WORDS

CHAPTER I

LATIN LITERATURE

The Latin literature produced during Columbus' period, or at least the books written in Latin, are literally legion. There has seldom been an age of greater literary productivity, and in every department men wrote in Latin. It was the universal language of scholars. Every educated man understood it; whenever he wrote for educated men he employed it. When scholars of different languages met it was a ready resource. This custom did not begin to lose its hold until after the end of Columbus' Century, though it received a severe shock from Paracelsus' refusal to use anything but the vernacular and was given its death blow by the popularization of even theological subjects in the vernacular during the reformation movement. Latin continued for two centuries after Luther's time to be the medium of communication between scholars, but its use gradually went out in the depths of the degradation of scholarship in the eighteenth century.

There are many who apparently can see only unmixed good in the gradual supersession of Latin by the various vernacular languages, but a universal academic language had many advantages. As a rule, an educated man needed to know only one language besides his own at this time. Practical education for scientific purposes, and above all for law and medicine and philosophy and theology, was very much simplified. Now the student of science must know, as a rule, at least two languages besides his own. In recent years we have come to recognize the need of a universal language, and hence the successive waves of interest in newly-invented languages. Latin, however, besides its practical usefulness as a common tongue, rewarded the student of it by opening up to him a precious literature which made it well worth his while to have devoted time and labor to its acquisition.

The most fertile period of modern Latin was undoubtedly the era of the Renaissance from 1450 to 1550, yet of all this Latin writing of Columbus' Century very little endures in the sense of being read for its own sake in our time. The old books have many of them gone up in value, but that is mainly because of their special significance in the history of their particular science or in the development of printing. Books like Vesalius' "*Fabrica Humani Corporis*" have become classics that every scholarly student of medicine must have seen, though in practical value they have been superseded by later books. Some of the philosophical and theological works of the period and a number of the mystical and spiritual works are still read for their own sake, but with certain exceptions, like Thomas à Kempis' works and others that we shall mention, these are rather curiosities that appeal to the erudition of the special student than real living books to be consulted.

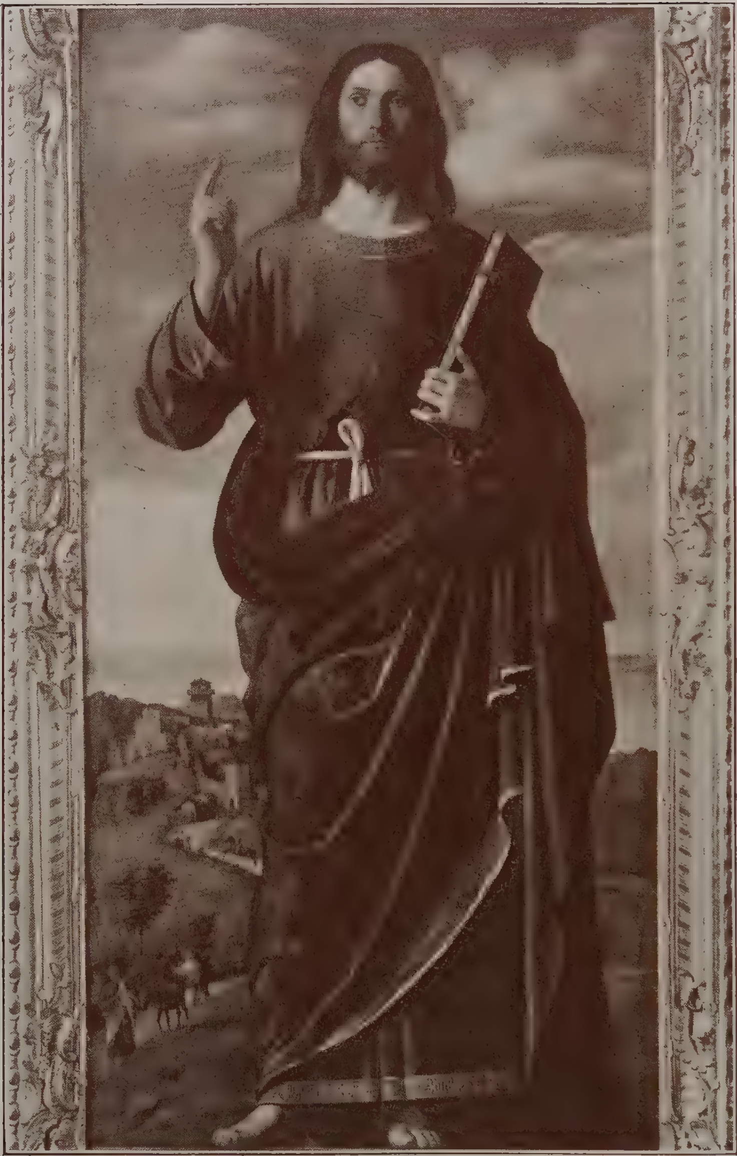
An immense amount of Latin verse was written at this time. Sannazaro, one of the ablest members of the Academy of Naples, wrote a poem comparable in size to Virgil's Æneid on "The Birth of Christ." This is only one instance. There were literally hundreds of scholars at this time who thought because they could write Latin verses in which the rules of grammar and prosody were not violated, and above all if they could use the words that had been employed by their favorite Latin authors and repeat felicitously the expressions of Virgil and Horace and the classic poets generally, that they were making literature at least if not poetry. Men have always had such illusions, have always written what was only of interest for their own time and have had the pleasure and satisfaction derived from the occupation of mind and the anticipations of reputation and glory. None of this Latin poetry has survived, and indeed it is only a very rare specialist in Latin literature, and usually one who has devoted himself to Renaissance Latin, who is likely to know anything about it. Undoubtedly some of it was eminently scholarly. There is no doubt either that not a little of it was of fair poetic quality. It was all, however, of distinctly academic character, and it has gone into the limbo of forgotten writing, which now contains such an immense amount of material.

There is probably nothing which shows so clearly that the writer, and above all the poet, is born and not made, that it is originality of thought and not mode of expression that makes for enduring literature, as the fate of so much of the product of these Renaissance writers. On the other hand, there is nothing that better illustrates the value of originality of thought apart from style than the preservation as enduring influences upon mankind of a series of books in which style was probably the last thing that the author thought about, and the mode of expression had almost no place in his mind compared to his desire to set forth his thought effectively.

Three of the books that have lived from this time and will, so far as human judgment can foresee, always continue to live, are Thomas à Kempis' *"De Imitatione Christi,"* Sir Thomas More's "Utopia" and St. Ignatius of Loyola's *"Exercitia Spiritualia."* All three of them were written in Latin because that was the language in which they would appeal to most readers at the time. All three of the authors probably thought nothing at all about the language that they were using except for its convenience for others, inasmuch as it could be read by the men of all nations whom they most wished to reach. All of them are direct, simple, even forcible in their modes of expression, but there was surely little filing done and probably very little rewriting. Thomas à Kempis' book, almost without a doubt, flowed from his pen just in the way that his words flowed out of his full heart in the spiritual conferences that he gave to his brethren. There was probably never a thought given to verbal nicety except to secure as simple an expression of his overflowing ideas as possible. The "Utopia" is written in correct, but not classical Latin, and it is very likely that Erasmus would have found many faults of usage in it, while the Ciceronians of that time would surely have been horrified at the very thought of having to read such Latin and would scarcely be able to understand how anyone could write such unCiceronian phrases. As was said of Michelangelo, St. Ignatius wrote *things* rather than words, and the "Spiritual Exercises" are a mine of thought, but not a model of style in any sense.

There has been question as to whether the "Imitation of Christ" was really written by Thomas à Kempis, but that question has now, I think, been definitely settled. Everything points to the authorship by the brother of the Common Life, who was born in the little town of Kempen and lived some seventy years in the Monastery of St. Agnes, acting as spiritual adviser to his brethren, giving them consolation and advice in times of trial, directing their thoughts always to the higher life. There are many Flemicisms, that is, Latin usages which were common in the Netherlands of this time, in most of the manuscripts. It has been argued that since these do not exist in all the manuscripts, the argument founded on them is not absolute. The preponderance of evidence, however, is for the Flemish copies as being nearer the original, and the absence of these special modes of expression in other manuscripts only indicates that a great many copyists of the time, particularly in Italy and France, were quite aware of these imperfections of language and endeavored to correct them out of their better knowledge of Latin. This only serves to show how little the style of the book had to do with its popularity and that it was the thought that appealed to the world of the time and has continued ever since to give the work wide popularity.

À Kempis himself was born in the fourteenth century, but as he lived to be past ninety, dying in 1471, more than twenty years of his life, during which he was active and in possession of his faculties, were passed in our period. The "Imitation of Christ" was probably written some twenty years before Columbus' Century began, but did not take the definitive form in which we know it until about the beginning of our period. It has a right to a place, therefore, among the great works of the time. I have sometimes suggested that three men, whose names begin with *k* sounds, accomplished magnificent broadenings of human knowledge at this time. Columbus discovered a new continent, Copernicus revealed a new universe and à Kempis unveiled a wonderful new world in man's own soul.



CIMA DA CONEGLIANO, CHRIST (DRESDEN)

He did as much for the microcosm man as Copernicus for the cosmos or Columbus for our earth. Hitherto unexplored regions were laid bare and the beginning of the mapping out of them was made. More than either of his great contemporaries, however, à Kempis finished his work. Very little has been added to what he was able to accomplish for man's self-revelation in his little book.

The work did not spring into popularity at once, though it gradually began to be known and used by chosen spirits in many places, and some of the greatest of the men of the time learned to appreciate it. It is a charming testimony to the fact that à Kempis himself first did and then taught that he cared so little for the reputation attached to his work, that his name was not directly associated with it, and in the course of time there came to be some doubt about its authorship. "If thou wilt profitably know and learn," he had said, "desire to be unknown." It is one of the most difficult of tasks, but the humble brother of the Common Life who had written a sublimely beautiful book had learned it. He had written other books, indeed there are probably at least a dozen attributed to him on reasonably good evidence, yet had said, "In general we all need to be silent more than to speak, indeed there are few who are too slow to speak." None of his other books are quite equal to the "Imitation," yet many of them, as "The Little Garden of Roses" and "The Valley of Lilies," are well worth reading and exhibit many of the traits of charming simplicity, marvellous insight and psychological power that have given his greatest work its reputation.

All down the centuries since men have admired and praised the "Imitation." It has not been a classic in the sense of a book that everyone praises and very few read, but on the contrary it has been the familiar reading of a great many of the chosen spirits among mankind ever since. To have been the favorite book of Sir Thomas More, Bossuet and Massillon, of Loyola and Bellarmine, of John Wesley, Samuel Johnson, Lamartine, La Harpe, Michelet, Leibnitz and Villemain is indeed a distinction. Nor has it appealed only to Christians, for men like Renan and Comte almost in our own time have praised it very highly. Far from its reading being confined to scholars by profession or those much occupied with the things of the spirit, we find that it was the favorite reading of General Chinese Gordon, General Wolseley, the late Emperor Frederick and Stanley the explorer. George Eliot shows her deep appreciation of it in "The Mill on the Floss," where she says that "It works miracles to this day, turning bitter waters into sweetness." Sir James Stephen speaks of it as a work "which could not fail to attract notice and which commended itself to all souls driven to despair." The late Lord Russell of Killowen always carried a copy of it with him and used to read a chapter in it every day quite as Ignatius of Loyola had done three centuries and a half before. The frequent surprise is the contrast of the men devoted to it. Pobiedonostseff, the head of the Holy Russian Synod, the power behind the Czar for so long, used to read in it every day.

St. Francis de Sales said of "The Imitation," "Its author is the Holy Spirit." Pascal said of it, "One expects only a book and finds a man." De Quincey declared: "Next to the Bible in European publicity and currency this book came forward as an answer to the sighing of Christian Europe for light from heaven." Dr. Samuel Johnson declared that "Thomas à Kempis must be a good book, as the world has opened its arms to receive it." The sentence in it which he repeated most frequently and which evidently had come home to him is "Be not angry that you cannot make others as you wish them to be, since you cannot make yourself as you wish to be." Matthew Arnold, whose religious views might possibly be thought to bias his judgment with regard to it and whose feeling for style might be supposed to be deterred by its lack of finish in language, called the "Imitation" "The most exquisite document after those of the New Testament of all that the Christian spirit has ever inspired." What may be more surprising to some, he even did not hesitate to add that "Its moral precepts are equal to the best ever furnished by the great masters of morals—Epictetus or Marcus Aurelius."

Some of the expressions used with regard to the "Imitation" are among the most laudatory that have ever been used of any book. They come from men of all kinds, in all generations, in all nations since, and many of them among the most respected of their time. Fontenelle declared the "Imitation" "the finest book ever issued from the hand of man." Caro, the French philosopher, compares it with other books famous in the same ethical line, only to put it on a pinnacle by itself. "Open the 'Imitation,'" he says, "after having read the '*De Officiis*' of Cicero or the '*Enchiridion*' of Epictetus, and you will feel yourself transported into another world as in a moment." Lamennais declared that the "Imitation" "has made more saints than all the books of controversy. The more one reads, the more one marvels. There is something celestial in the simplicity of this wonderful book." Henri Martin, the French historian, declared, "This book has not grown old and never will grow old, because it is the expression of the eternal tenderness of the soul. It has been the consolation of thousands—one might say of millions—of souls."

Lamartine in his "Jocelyn" (and it must not be forgotten that Lamartine was an historian and a critic as well as a poet) wrote:

"Harassed by an inward strife,
I find in the 'Imitation' a new life—
Book obscure, unhonored, like to potter's clay,
Yet rich in Gospel truths as flowers in May.
Where loftiest wisdom, human and Divine,
Peace to the troubled soul to speak, combine."

La Harpe, a dramatist as well as a critic, whose "Cours de Littérature" was a standard text-book for so long, was in prison and sadly in need of comfort and consolation when he began to appreciate the "Imitation." There is almost no limit to his praise of it, and praise under these circumstances must indeed be considered to come from the heart. He wrote: "Never before or since have I experienced emotion so violent and yet so unexpectedly sweet—the words, 'Behold I am here,' echoing unceasingly in my heart, awakening its faculties and moving it to the uttermost depths."

It is not surprising then to find that Dean Church says of it, "No book of human composition has been the companion of so many serious hours, has been prized in widely different religious communions, has nerved and comforted so many and such different minds—preacher and soldier and solitary thinker—Christians, or even it may be those unable to believe." Dean Milman in his "Latin Christianity" declared "that this book supplies some imperious want in the Christianity of mankind, that it supplied it with a fulness and felicity which left nothing to be desired, its boundless popularity is the one unanswerable testimony." He even has some words of praise for à Kempis' style: "The style is ecclesiastical Latin, but the perfection of ecclesiastical Latin of pure and of sound construction." Dean Plumptre, whose studies of Dante and the great Greek poets gave him so good a right to judge of the place of books in the world's literature, is one of the worshippers at the shrine of the "Imitation." The Rev. Dr. Liddon, the great Greek lexicographer, called it "the very choicest of devotional works, the product of the highest Christian genius and one of the books that have touched the heart of the world."

More than this could scarcely be said of any book. Was there ever a chorus of praise quite so harmonious? Did praise ever come from men by whom one could more wish to be praised? Evidently, the "Imitation of Christ" is for all men at all times. It is the poem of our common human nature.

When Sir John Lubbock included the "Imitation" in his list of the hundred best books some people expressed surprise. The editor of the *Pall Mall Gazette* invited the opinions of his readers on the subject, and some of the most distinguished of English churchmen, as well as many English men of distinction, said their praise of it publicly. Archdeacon Farrar, whose sympathies with the fourth book of the "Imitation" would certainly be very slight and whose opposition to many Catholic doctrines that à Kempis received devoutly might possibly be expected to prejudice him somewhat against it, wrote that "If all the books in the world were in a blaze the first twelve I should snatch from the flames would be the Bible, 'The Imitation of Christ,' 'Homer,' 'Æschylus,' 'Thucydides,' 'Tacitus,' 'Virgil,' 'Marcus Aurelius,' 'Dante,' 'Shakespeare,' 'Milton' and 'Wordsworth.'" The men with whom à Kempis is thus placed in association are among the accepted geniuses of literary history before as well as since his time. It would not be difficult to make a sheaf of quotations each one of them scarcely less laudatory than this of Archdeacon Farrar. They come from all manner of men, devout and undevout, bookish and practical, spiritual and worldly, men of wide experience in life, who have done things that the world will not soon forget, and who, if any, have the right to speak for the race as regards the significance of life and what any book can mean for direction and guidance in the living of it and consolation in its trials and difficulties.

Lamartine in his " Entretiens Familiers " called it " the poem of the soul," and declared that it " condensed into a few pages the practical philosophy of men of all climates and of all countries who have sought, have suffered, have studied and prayed in their tears ever since flesh suffered and the mind reflected."

To adopt his term, the " Imitation " is literally a great poem. It is a creation and it is a vision. The poet is the creator and the seer. The greater he is, the more capable he is of taking the ordinary materials of life and making great poetry of them. The greater the poet, the more of mankind he appeals to. It is the vision of the experiences of man and not of individual men that the poet sees. What all have seen and felt, but none so well expressed is the theme of poetry. The more one reads of the " Imitation," the more one realizes all the truth of this characterization of it as poetry. If one takes passages of it as they have been put into rhythmic sentences the feeling of the poetry in them is brought home very clearly. For instance, this from Chapter XXII of the third book:

" Why one has less, another more;
Not ours to question this, but Thine
With Whom each man's deserts are strictly watched.
Wherefore, Lord God, I think it a great blessing
Not to have much which outwardly seems worth
Praise or glory—as men judge of them."

Or if the ode—for such it really is—on Love from the fifth chapter of the third book be read alongside one of the great choruses from the Greek tragedians, as above all some of those of Sophocles in "Antigone" or the "Oedipus at Colonos," the lofty poetic quality will be easier to grasp:

"A great thing is love,
A great good every way.
Making all burdens light,
Bearing all that is unequal,
Carrying a burden without feeling it,
Turning all bitterness to a sweet savor.
The noble love of Jesus
Impelleth men to good deeds
And exciteth them always
To desire that which is better.
Love will tend upwards
Nor be detained
By things of earth
It would be free.

Nothing is sweeter than love,
Nothing stronger, nothing higher,
Nothing fuller, nothing better
Nor more pleasant in heaven or earth.
For love is born of God
Nor can it rest
Except in Him
Above all things created.

Love is swift, sincere,
Pious, pleasant and delightsome,
Brave, patient, faithful,
Careful, long suffering, manly,
Never seeking its own good;
For where a man looks for himself
He falls away from love."

The next most significant book of the Latin literature of the time is Sir Thomas More's "Utopia." Few books are more surprising in the midst of their environment. Probably no one has ever so risen above the social atmosphere around him and breathed the rarefied air of ideal social conditions as More in the "Utopia." It was written under the influence of his first acquaintance with Plato's "Republic" and as a result of his talks with that great French scholar and friend of Erasmus, Peter Giles, or as he is known in the history of scholarship, Aegidius. More discussed not merely literary topics, but the application of the Greek literature that they were both interested in to the contemporary politics of Europe and the social conditions of their time. Not yet thirty years of age, More's powers of observation were at their highest, and his principles of life had not yet been hardened into conventional form by actual contact with too many difficulties. With no experience as yet of government and with the highest ideals of fellowship and unselfishness, he wrote out a wonderful scheme of ideal government by which the happiness of mankind would be attained. He saw clearly through all the social illusions and the social problems, and with almost youthful enthusiasm put forth his solution of all the difficulties he saw.

Undoubtedly the "Utopia" is the main literary monument of Sir Thomas More's great genius. Sir Sidney Lee in his "Great Englishmen of the Sixteenth Century" (Scribner's, 1904) declares that "it is as admirable in literary form as it is original in thought. It displays a mind rebelling in the power of detachment from the sentiment and the prejudices which prevailed in his personal environment. To a large extent this power of detachment was bred of his study of Greek literature." There is, perhaps, no greater series of compliments for the significance of the classics in education than the fact that these men of the Renaissance found in the Greek books not only the source of their literature, but also their art and architecture and even their science, and above all were given the breadth of mind to follow the suggestions that they met with. It must not be forgotten, however, that More was also deeply influenced by St. Augustine's "*De Civitate Dei.*" Evident traces of this can be found. It is known that he had been reading the work of the great Latin father of the Church and that he admired him very deeply. Without any narrowness or bigotry, inspired by Augustine's great work, it was a

Christian Republic of Plato that the future Lord Chancellor of England sketched for his generation.

"Utopia" was published at the end of 1516 in Louvain, then probably the most prominent and undoubtedly the most cosmopolitan centre of academic learning in Europe. There were perhaps 5,000 students at the University there at the moment, and it was one of the large universities of the world. A new edition was published only four months later from a famous press in Paris, and within the year the great scholar-printer, Froben of Basel, produced what we would now call an *édition de luxe* at the suggestion and under the editorship of Erasmus, and with illustrations by Erasmus' friend, for whom More was to be such a beneficent patron later in England—Hans Holbein.

It is not surprising to hear that the book was warmly welcomed by all the scholars of Europe. The epithets which the publishers bestowed on it in the title page, *aureus, salutaris, festivus*—a golden, wholesome, optimistic book—were adopted from expressions of opinion uttered by some of the best scholars of Europe. Erasmus was loud in his praise of it, it was warmly welcomed in France, it found its way everywhere among the scholars of Italy, it was read, though not too openly, in England, where there was some suspicion of its critical quality as regards English government and where Tudor wilfulness did not brook critical review of its acts.

The book was eminently interesting; there probably never has been a *social Tendenz* novel before or since that has been so full of interest. The preliminary chapter of the book is, as Sidney Lee says, "a vivid piece of fiction which Defoe could not have excelled." More relates how he accidentally came upon his scholarly friend, Peter Giles, in the streets of Antwerp in conversation with an old sailor named Raphael or Ralph Hythlodaye. This name means an observer of trifles. More takes advantage of the current interest in the discoveries of the Western Continent by making him a sailor lately returned from a voyage to the New World under the command of Amerigo Vespucci. The name America after Amerigo was just gaining currency at that time and this added to the interest. Ralph had been impressed by the beneficent forms of government which prevailed in the New World. He had also visited England and had noticed social evils there which called for speedy redress. The poor were getting poorer, the rich were getting richer, the degradation of the masses was sapping the strength of the country, the wrong things were in honor and social reform must come, it was hinted, or there would be social revolution. The book contained a fearless exposure of the social evils very commonly witnessed in every country in Europe at that time, though tinged more by More's experience in England than anywhere else.

Since its publication, the book has been read in every generation that has taken its social problems seriously. It was not published in England until 1551, but was translated into English again by Bishop Burnet in a form that has made it an English classic. It contains such a surprising anticipation of so many suggestions for the relief of social evils that are now discussed that I have preferred to put a series of quotations from it in the Appendix in order to show how little there is new in human thinking, and above all how a sympathetic genius at any time succeeds in seeing clearly and solving as well the problems of mankind as at any other time, in utter contradiction of the so much talked of evolution that is presumed to bring these problems gradually before the bar of human justice and secure their amelioration. The book is worthy to be placed beside Plato's " Republic," and it will be more read in the near future than probably any other work of similar nature. In our own generation editions of it have been issued in every modern language and a number of editions in English. It is one of the enduring books of mankind that a scholar of any nation cannot afford to confess not having read and in which the social reformer will ever find suggestions for human uplift and the greatest happiness for the greatest number.

The third great book of the Latin literature of the century is St. Ignatius's " *Exercitia Spiritualia.*" This is not a book to be read, however, but to be lived. It is a book of material for thought rather than of words to be conned. It has deeply influenced every generation of men ever since. If it had done nothing else but form all the members of his own order ever since, that would be enough of itself to stamp it as a very great human document. It has, however, deeply influenced all the religious orders both of men and women since it was written, and is now the basis of nearly all of the formative exercises on which the modern religious life is based. It is undoubtedly the work of a great spiritual and intellectual genius who above all knew how to suppress himself. There is not a word too much in it, and the one complaint has been of an abbreviation beyond what would make it readily intelligible. Those who have studied it most deeply, however, find no difficulty of understanding, though they recognize the impossibility, unless perhaps after many years of devotion to it, of comprehending all of its precious significance. It is the directions for the spiritual life in shorthand, and it is surprising that a man should have committed it to all the possibilities of misunderstanding in its present form, but its lack of too great detail makes it all the more precious and leaves that room for the expression of the individuality of the one who gives the exercises that is so necessary.

The fourth book that deserves a place in any account of the Latin literature of this period is Erasmus' "*Colloquia,*" though doubtless some might plead for a place for the "*Encomium Moriæ,*" which has had an academic immortality at least. The "*Colloquia*" is eminently a book for scholars written in the elegant Latin that Erasmus could employ so effectively, and it went through many editions in his lifetime and has had many reprints ever since. It was distinctly a book of style rather than of matter and of academic rather than popular interest. Scholars at all times have turned to its pages for refreshment and information and have been regaled by its charming style and its wit. It is entirely too bitter to be always admirable, but many of its satirical parts give an excellent idea, though undoubtedly exaggerated if taken as a picture of the times, of the conditions of education at the moment. It has not been often translated, and hence, in our generally complacent ignorance of Latin, is less known in our time than in any other since its publication. Its career in comparison with the three other volumes of Latin literature in this chapter, its contemporaries, emphasizes the difference between the place of style and thought in the world literature. The scholars of the period doubtless looked upon Erasmus' book as a very triumph of scholarship, a great contribution to world literature. "The Imitation of Christ," "Utopia" and the "Spiritual Exercises" were read originally not for themselves, but for a purpose. These have maintained an active life, however, while at most the "*Colloquia*" has enjoyed a rather inanimate academic existence.

This does not detract from the merit of the book, however, nor from that of Erasmus' other contributions to the Latin literature of the time. Latin was at best an adopted language, however, and the expression of native genius in it could scarcely be expected. The prose has been eminently more fortunate than the verse, and it is to the former, not the latter, that we turn in order to find some of the great contributions of the period to world literature.

CHAPTER II

ITALIAN LITERATURE

As I have said in the Introduction, in spite of the supreme greatness of the artistic products of Columbus' Century, its paintings, sculpture and architecture, the literature of the time was not only not neglected, but occupies a place in the history of culture only second to that of the Periclean age of Athens. For a long time, indeed, the Age of Leo X, as it was called, was considered to be a serious rival in its literary treasures to that marvellous period of Greek thinking and writing. Subsequently the literary world passed through a period of exaggerated critical depreciation of it. There has been, however, a growing tendency in recent years, indeed during the last half century, to restore older appreciation of the literature of this period and to value it highly.

In every country in Europe there were books written during this time which not only will never die, but which are part of the familiar reading of the scholars at least of all time. Not that there are not many popular elements in this literature, but its scholarliness has made it a special favorite, and there are not a few books written at this time which no one with any pretence to education would willingly confess to being ignorant of. Ariosto, Machiavelli, Rabelais, Villon, Sir Thomas More, Erasmus, St. Teresa, Marguerite of Navarre and the Pleiades, as well as the Collects of the English Prayer Book, all these have an enduring significance in the realm of world literature that has brought about the publication of editions and translations of them in every cultivated language even in our generation over four centuries after their original production.

The Italian literature of the century is especially rich. It would be quite impossible to give it any adequate treatment in a chapter, for this is the Renaissance period, and the literature

TITIAN, ARIOSTO

of the Italian Renaissance has been treated in many volumes. The most important of the writers is undoubtedly Ariosto, who has been much more appreciated by his own people than by other countries, though at times of deep interest in literature he has always had a profound influence on writers beyond the bounds of Italy. Saintsbury, in "The Earlier Renaissance," has summed up his best qualities in some sentences that, considering the distance in time and place and temperament which separate poet and critic, may very well be taken as highest praise. Ariosto, he says, "is very nearly if not quite supreme in more than one respect. It may also be said that he never fails and that this freedom from failure is not due to tame faultlessness or a cowardly absence from the most difficult attempts—that it will go hard—but we must rank him, at lowest, just below the very greatest of all. Such a place is, I believe, his right even on the calculus of those who refuse the historic estimate or at least admit it with grudging. It has been said that as Rabelais he represents the greatest literature of his time penetrated most fully by the extra literary as well as the literary characteristics of that time; and it may be added not merely that few times have been so thoroughly represented, but that few have ever so thoroughly lent themselves to representation."

With what is perhaps almost pardonable compatriotic enthusiasm, considering his really great merits as a poet, he has been called the Italian Homer, and his great work, "*Orlando Furioso*," has been called "the most beautiful and varied and wonderful romantic poem that the literature of the world can boast of." In it are woven together with charming art the two great romantic cycles of Charlemagne and Arthur. It is the poetic apotheosis of chivalry written in wonderful perfection of style and taking form and with marvellous variety of incident. While the great poem has been a favorite rather with the Italians than with foreigners, when one realizes how deeply cultured Italian readers have been as a rule for all the centuries since Ariosto's time, it is probable that no higher compliment than this devotion of his compatriots could be paid to him. The "Orlando" has not been without honor, however, in foreign countries, among those whose opinion is most to be valued. It cast into the shade the numberless poetical romances that had been written during the preceding century. None of the many imitations that it evoked have approached it either in beauty of form or style or in deep underlying human interest. Ariosto knew above all the human heart and had excellent control of pathos. He is especially capable in making the impossible or the improbable seem reasonable. Now, after four centuries, we know that he is of all time and belongs to the culture of all centuries.

Modern readers unacquainted with the writings of the older time are often inclined to think that the interests of the older writers were very different from those of humanity to-day and that, as a consequence, the reading of them would surely be a great bore. Even a little reading of Ariosto would show how eminently human and for all time a classic writer is and how literally it is true that he is often a commentary on the morning paper. One or two of Ariosto's comparisons which show his interest in humanity and in life around him will serve to illustrate this. His observation of children is as close as that of Dante:

"Like to a child that puts a fruit away
  When ripe, and then forgets where it is stored,
If it should chance that after many a day
  Thither his step returns where is his hoard,
He wonders to behold it in decay,
  Rotten and spoiled, and richness all outpoured;
And what he loved of old with keen delight
He hates, spurns, loathes, and flings away in spite."

Like Dante, too, he was an observer of animals and noted especially the ways of dogs.

"And as we see two dogs the combat wage,
  Whether by envy moved, or other hate,
Approaching whet the teeth, nor yet engage,
  With eyes askance, and red as coals in grate,
Then to their biting come, on fire with rage,
  With bitter cries, and backs with spite elate,

So came with swords and cries and many a taunt
Circassia's knight and he of Chiaramont."

Ariosto's other poems, besides his Epic, are of minor significance. He wrote a series of satires that are rather chatty essays, on subjects literary and personal, in verse, than satires in our sense of the word. Above all, Ariosto took his own disappointments in life good-humoredly, and his optimism would remind one of Cervantes in certain ways. Garnett in his "History of Italian Literature" (page 151) says, "His lyrical pieces are not remarkable, except one impressive sonnet in which he appears to express compunction for the irregularities of his life:

"How may I deem that Thou in heaven wilt hear,
O Lord divine, my fruitless prayer to Thee,
If for all clamor of the tongue Thou see
That yet unto the heart the net is dear?
Sunder it Thou, who all behold'st so clear,
Nor heed the stubborn will's oppugnancy,
And this do Thou perform, ere, fraught with me,
Charon to Tartarus his pinnace steer.
By habitude of ill that veils Thy light,
And sensual lure, and paths in error trod,
Evil from good no more I know aright.
Ruth for frail soul submissive to the rod
May move a mortal; in her own despite
To drag her heavenward is work of God."

In Italy the *sacre rappresentazioni,* as the Miracle and Mystery plays were called, had a distinct period of development, though not equal to that of the English, and good specimens of them have not been preserved for us. We have evidence of the influence of them, however, in the fact that some of the scholarly poets of the time wrote plays founded on the myths of the old Olympian religion after the model of some of these mystery plays. Politian's "*Orfeo*" is perhaps the best example of this. It was little better than an improvisation composed in the short space of two days at Mantua on the occasion of Cardinal Francesco Gonzaga's visit to his native town in 1472, but it marks an epoch in the evolution of Italian poetry. Addington Symonds has even gone so far as to say that "it is the earliest example of the secular drama, containing within the compass of its brief scenes the germ of the opera, the tragedy and the pastoral play." It contained portions that were to be sung as well as to be spoken, and there are episodes of *terza rima,* Madrigals, a Carnival song, a Ballata as well as the choral passages that are distinctly operatic. After Orpheus has violated the law that he must not look upon his wife until they have reached the upper world, his complaint is of lyric quality that has something of the Grecian choric ode in it. Addington Symonds in his "Sketches and Studies in Southern Europe" has translated the passages so as to give an excellent idea of the character of the play:

"Who hath laid laws on Love?
Will pity not be given
For one short look so full thereof?
Since I am robbed of heaven,
Since all my joy so great is turned to pain,
I will go back and plead with Death again!

TISIPHONE

Nay, seek not back to turn!
Vain is thy weeping, all thy words are vain.
Eurydice may not complain
Of aught but thee—albeit her grief is great.
Vain are thy verses 'gainst the voice of fate!
How vain thy song! For death is stern!
Try not the backward path: thy feet refrain!
The laws of the abyss are fixed and firm remain."

Addington Symonds has given a number of examples of the popular Italian poetry of the Renaissance * which show the qualities of this mode of literature very well, and above all illustrate how like in its character it is to the lighter modes of verse at all times and especially our own. Politian, the great scholar whose learning filled the lecture rooms of Florence with students of all nations and whose critical and rhetorical works marked an epoch in the history of scholarship, was able to unbend at times and write *ballate,* as they were called, though they were very different from our ballads, which were to be sung during the dances in the piazzas on summer evenings. Stanzas from some of these will serve to show their character. The last stanza, for instance, of his May Ballad is on the world-old theme, " Gather ye rose-buds while ye may."

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* "Sketches and Studies in Southern Europe," New York, 1880.

" I went a-roaming, maidens, one bright day,
In a green garden in mid month of May.

For when the full rose quits her tender sheath,
When she is sweetest and most fair to see,
Then is the time to place her in thy wreath,
Before her beauty and her freshness flee.
Gather ye therefore roses with great glee,
Sweet girls, or ere their perfume pass away.

I went a-roaming, maidens, one bright day,
In a green garden in mid month of May."

Many of the Italian scholars of the period gave the time to the writing of ballads, and one which has been ascribed to Lorenzo dei Medici is often quoted. In it the word *signore,* which means lord, is used instead of the name of the lady, because she is the lord of the singer's soul.

" How can I sing light-souled and fancy-free
When my loved lord no longer smiles on me?

One only comfort soothes my heart's despair,
And mid this sorrow lends my soul some cheer;
Unto my lord I ever yielded fair
Service of faith untainted pure and clear;
If then I die thus guiltless, on my bier
It may be she will shed one tear for me.

How can I sing light-souled and fancy-free
When my loved lord no longer smiles on me?"

These ballads were often on the pagan theme of snatching life's opportunities while one might, a popular expression of the Renaissance time, an echo of Horace's *Carpe diem,* "snatch the day," which the Roman had taken from his Greek models. Every now and then, however, there is a more serious note in the Carnival songs written to be sung during the revels at the Carnival time, when it is surprising to find such a thought emphasized. One of the best known of these Carnival songs is attributed to Lorenzo de' Medici:

"Fair is youth and void of sorrow;
But it hourly flies away.
Youths and maids, enjoy to-day;
Naught ye know about to-morrow.

Midas treads a wearier measure:
All he touches turns to gold:
If there be no taste of pleasure,
What's the use of wealth untold?

What's the joy his fingers hold,
When he's forced to thirst for aye?
Youths and maids, enjoy to-day;
Naught ye know about to-morrow."

After Lorenzo's death one of these Carnival songs, to express the grief of his people for him, written by Antonio Alamanni, was sung by maskers habited as skeletons who rode on a car of death, the music to it being that of a dead march. As a contrast to the less serious songs it is worth quoting:

"Sorrow, tears, and penitence
Are our doom of pain for aye:
This dead concourse riding by
Hath no cry but penitence!

PALMA VECCHIO, POET (SOMETIMES CALLED ARIOSTO)

E'en as you are, once were we:
You shall be as now we are:
We are dead men, as you see:
We shall see you dead men, where
Naught avails to take great care,
After sins, of penitence.

We too in the Carnival
Sang our love-songs through the town
Thus from sin to sin we all
Headlong, heedless, tumbled down;—
Now we cry, the world around,
Penitence! oh, penitence!

Senseless, blind, and stubborn fools!
Time steals all things as he rides:
Honors, glories, states, and schools,
Pass away, and naught abides;
Till the tomb our carcass hides,
And compels this penitence."

Strange as it may seem, the Italian prose of Columbus' Century has had a wider vogue and influence than its poetry. Two literary springs in prose have flowed out of Italy—fiction and history. The greatest of modern historical writers is undoubtedly Machiavelli. His name has been so much deprecated because of the doctrines that he is thought to have suggested that very few people realize what a profound student of human nature he was and how deep was his philosophy. His famous book, "*Il Principe*" (The Prince), was written within a decade of Columbus' death and at once attracted wide attention. This great political monograph is a calm analysis of the various methods whereby an ambitious conscienceless man may rise to sovereign power. It is usually supposed to be a setting forth of his own absolutely principleless philosophy. As a matter of fact, it is quite as much a lesson in politics for all the world, and while it might be studied faithfully by a man who wanted to usurp sovereign authority in a free state, it contains a series of lessons, which he who runs may read, for all citizens to know just how the downfall of their liberties may be brought about. There probably was never a contribution to political philosophy that has attracted so much attention. It is one of the few books that the serious politicians of all countries and nearly every generation since Machiavelli's time have considered it worth while to read. As a matter of fact, it is esteemed so highly as a human document that it is almost considered a serious defect in scholarship for anyone who claims to be educated to confess ignorance of it.

After a set of discourses on Livy, Machiavelli was commissioned to write the history of Florence. This is the first attempt in any literature to trace the political life of a people, showing all the forces at work upon them and the consequent effects. He places the portrait of Florence on the background of a very striking group of pictures drawn from Italian history. Necessarily, since he was employed at their suggestion for the purpose, the Medici are given a place of first rank and very great prominence. This was not mere subserviency, however, but was a very proper estimation of the rôle played by that house in the fortunes of Florence. He puts into the mouths of his historical characters speeches after the manner of Livy and Thucydides, and some of these speeches are masterpieces of Italian oratory. His style is vigorous and without any thought of ornamentation, informed only by the effort to express his meaning completely and forcibly. Later he wrote a play which John Addington Symonds, the English critic whose deep knowledge of Italian literature gives his opinion much weight, did not hesitate to call "the ripest and most powerful single play in the Italian language." There may be difference of opinion as to Machiavelli's place in philosophy, and above all in ethics, but there can be no doubt about his genius as an historian and a writer, as a profound student of men and their ways and one of the greatest contributors to political philosophy.

We have come to discount all that has been said in derogation of Machiavelli's personal character, though it must not be forgotten that even in the older time there were men who realized that his book was an essay in political philosophy that made a wonderful revelation and not in any sense a confession of personal opinions. It has been said that we owe the expression, "Old Nick," as used familiarly for the devil, to the fact that Machiavelli's first name was Nicholas. Sam Butler long ago wrote:

"Nick Machiavelli had ne'er a trick,
Though he gave his name to our old Nick."

In our own time some of the men whose wide knowledge and large experience have best fitted them to express an opinion on Machiavelli have been most emphatic in their high estimation of his character and influence. Above all, they have insisted on the enduring character of his work and the fact that it appeals to the essential in human nature, not to the passing fads of any single generation. Two such different men in intellectual training as John Morley and Lord Acton are agreed on this as they could not have agreed on most other things. Morley said that "Machiavelli was a contemporary of any age and a citizen of any country." Lord Acton said that he was "no vanishing type, but a constant and contemporary influence."

Besides a novel, which we quote from later in this chapter, and his political and historical works, Machiavelli wrote a series of plays and poems which are of high literary value. Garnett in his "Italian Literature" says that "he came nearer than any contemporary, except Leonardo da Vinci, to approving himself a universal genius. No man of his time stands higher intellectually, and his want of moral elevation is largely redeemed by his ample endowment with the one virtue chiefly needful to an Italian of his day, but of which too many Italians were destitute—patriotism."

Another of Columbus' great contemporaries among Italian writers was Guicciardini, the Italian historian (1483-1540). Unlike most of the great historians, he was a man of affairs. When less than twenty he was sent as Florentine Ambassador to the King of Spain, and in his early twenties, under Pope Leo X, governed Modena and Reggio with such talent as drew wide attention to him. He was the Lieutenant-General of the Anti-Imperial Army in 1527, later was one of the Eight at

Florence, and from 1531 to 1534 ruled Bologna as Papal Vice-Legate. He tells the story of Italy from 1492 to 1534 in great detail. He writes as an eye-witness who had himself been prominent in most of the scenes that he describes. The mass of matter is not allowed to obscure the picture as a whole, and the work has distinct literary value. Probably never in the world's history has such a description of events come from a man who was himself one of the most prominent actors in them. His work has been declared "the greatest historical work that had appeared since the beginning of the modern era" ("Encyclopædia Britannica").

About the middle of the nineteenth century Guicciardini's hitherto unpublished works were given to the public in ten volumes and served to throw wonderful light on the historian himself. His "*Ricordi Politici*" deserve to be placed beside Machiavelli's "Prince," and it is easy to understand, after reading them, that Guicciardini regarded his friend Machiavelli somewhat as "an amiable visionary or political enthusiast." There has probably never been a set of human documents that illuminated the heights and depths of humanity so well as these writings of the Renaissance. To read Machiavelli, Guicciardini's "*Ricordi,*" Benvenuto Cellini's "Autobiography" and Rabelais is to see the contradictions that there are in this microcosm man better than is possible in any other way. If we but add Montaigne, who was educated in our century, the picture is complete. These men of the Renaissance saw clearly and deeply into humanity through the lens of themselves. Guicciardini, devoid of passion as well as of high moral standards in personal life, eminently loyal to his patrons at all times, just so far as administration of law went, and unquestionably able, possesses all that ordinarily is assumed to bring the admiration if not the respect of men, yet no one can read his "Reminiscences" without feeling the deepest repugnance for his cynicism, selfishness and distrust of men. Ranke has impugned his good faith as an historian, and his quondam repute is gone. It is this very contrast, as exhibited in his writings, that makes Guicciardini's works as valuable a contribution to the story of humanity as the many masterpieces of his contemporaries.

One of the writers of this time who must not be omitted, though his merit has not always been recognized, is Vasari, whose "Lives of the Painters" has interested every generation in every country who have occupied themselves much with the great artists. Himself an artist, living on intimate terms with many of the men whose lives he sketched and gathering anecdotes about them and rescuing many a personal trait from oblivion that otherwise would have been lost to posterity, Vasari succeeded in making an extremely valuable as well as interesting book. Some of his anecdotes have been discredited, and he has often been open to the criticism of lack of critical acumen in his compilations of materials, but his industry, his recognition of what was likely to be of interest and his untiring efforts to make his sketch as complete as possible, deserve the recognition which they have obtained. While his style is apparently most artless, he possesses, as Garnett has said, "either the science or the knack of felicitous composition to an extraordinary degree." It must not be forgotten that this apparent lack of art is often the highest art, and so it is not surprising to hear Vasari spoken of as the Herodotus of art. His good taste in art as well as in literature is demonstrated by his admiration for the first fruits of the early Tuscan school which were neglected in his day. He was one of the genial, lovable men of the time who made many friends.

The most popularly interesting phase of the literature of the Renaissance and Columbus' Century for our time is doubtless the fiction that was written so plentifully and so widely read during the period. Whenever a large number of people become interested in reading, after a time more and more superficial reading is provided for them until finally the most trivial of story-telling becomes the vogue. This has happened at a number of times in the world's history. It can be traced in Rome with the decadence, in the Oriental countries, as Burton's edition of the "Thousand and One Nights" shows so clearly, and in our own time as well as during the fifteenth and sixteenth century. Another interesting development is the tendency for the fiction that is popular among the better and supposedly more educated classes, gradually to be occupied more and more with sex problems and sexual questions of all kinds. Whenever many have leisure and a smattering of education, this occurs. It is quite noticeable during the Renaissance period, though a great many good stories were written of excellent literary quality without any tinge of this.

The writing of novels in Italy had begun with Boccaccio in the fourteenth century, and continued with Sacchetti and Giovanni Il Fiorentino. About the middle of the fifteenth century, however, this mode of writing became all the fashion, and the number of novels, though of course by the word *novelle* the Italians meant a short story, is almost without end. Very many of them have been lost, but a very large number have been preserved. The first of the writers of the time was Massuccio Salernitano, who flourished during the latter half of the fifteenth century and died towards its close. Doni has said of him, " Hail then to the name of Salernitano, who, scorning to borrow even a single word from Boccaccio, has produced a work which he may justly regard as his own." It is to him that we owe the first form of what afterwards became " Romeo and Juliet." Massuccio was a realist and called " Heaven to witness that the whole of his stories are a faithful narrative of events occurring during his own time." Fifty of his novels at least are extant.

Often these novel writers did not attempt any other mode of literature, and indeed not infrequently were not scholarly in any sense of the word, but the next of the Italian novelists of the time, Savadino degli Arienti, was an accomplished scholar and historian. His history of his native city Bologna is still considered very valuable by his countrymen. He entitled his tales " Porretane " because he declared that they had been recited at the baths of Porreto, which was the favorite summer resort and place of public amusement for the Bolognese. The recital of these would be supposed to occupy somewhat the place that moving pictures do now. There is a variety of amusing adventures, witty stories, love tales, and sometimes tragic incidents for contrast. Besides his novels and his history, Ariente wrote an account of illustrious ladies, *Delle Donne Clare,* dedicated to Giunipera Sforza Bentivoglio, which shows very clearly how the women of the Renaissance, as we have come to know them, were appreciated by their masculine contemporaries very early in Columbus' Century.

After Savadino comes Luigi da Porto. Crippled by a wound early in life, he turned from the army to literature and became the friend of many of the scholars of the time, especially Cardinal Bembo and members of the Gonzaga family. To him we owe "Juliet" in its best and purest form. It is the only story we have from him, but it secured world-wide reputation at the time and has never lost its interest for mankind. Porto was followed by Leonardo Illicini, another writer of a single novel which has been preserved and has gone through a number of editions. Illicini, or Licinio, as his name is sometimes given, was a physician, for a time the court physician to the Duke of Milan, afterwards professor of medicine at Ferrara and one of the distinguished philosophers of the time. Every man is said to have one good story in him, if he only has the time and energy to write it, and Illicini wrote his and attracted the attention of his distinguished friends and contemporaries by the nobleness and beauty of the sentiments which he incorporated into it and which make it a singular exception to the usual tenor of Italian novels.

Like Illicini, Machiavelli, the historian and political philosopher, took it upon himself to write a novel which few people have read and yet which has a certain exaggeration of social satire which sets it rather closely in touch with our time. The story represents indeed a curious ever-recurring phase of the attitude that men are accustomed—for jest purposes only—to assume toward marriage. According to the story, the devils were very much disturbed over the fact that most of the married men who came to hell blamed their coming on their wives. Hell had been well enough so long as people were willing to admit that they were punished deservedly, but society there became very uncomfortable under this new dispensation. The devils resolved to send one of their number up to earth to find out about it. Belphagor, one of the fallen Archangels, having assumed the body of a handsome man of thirty and a large fortune, is commissioned to marry and live with a wife for ten years. He finds no difficulty in getting a bride, having "soon attracted the notice of many noble citizens blessed with large families of daughters and small incomes. The former of these was soon offered to him, and Belphagor chose a very beautiful girl with the name of Onesta." The name, which signifies purity, is evidently chosen for a purpose by Machiavelli, for, while the wife is as pure as an angel, she has more than the pride of Lucifer.

A good idea of the way the story develops can only be obtained by quoting a passage from the translation of the novel:

> "He had not long enjoyed the society of his beloved Onesta before he became tenderly attached to her, and was unable to behold her suffer the slightest inquietude or vexation. Now, along with her other gifts of beauty and nobility, the lady had brought into the house of Roderigo such an insufferable portion of pride that in this respect Lucifer himself could not equal her, for her husband, who had experienced the effects of both, was at no loss to decide which was the most intolerable of the two. Yet it became infinitely worse when she discovered the extent of Roderigo's attachment to her, of which she availed herself to obtain an ascendency over him and rule him with an iron rod. Not content with this, when she found he would bear it, she continued to annoy him with all kinds of insults and taunts, in such a way as to give him the most indescribable pain and uneasiness. For what with the influence of her father, her brothers, her friends and relatives, the duty of the matrimonial yoke, and the love he bore her, he suffered all for some time with the patience of a saint. It would be useless to recount the follies and extravagancies into which he ran in order to gratify her taste for dress and every article of the newest fashion, in which our city, ever so variable in its nature, according to its usual habits, so much abounds. Yet, to live upon easy terms with her, he was obliged to do more than this; he had to assist his father-in-law in portioning off his other daughters; and she next asked him to furnish one of her brothers with goods to sail for the Levant, another with silks for the West, while a third was to be set up in a goldbeater's establishment at Florence. In such objects the greatest part of his fortune was soon consumed. At length the carnival season was at hand; the festival of St. John was to be celebrated, and the whole city, as usual, was in a ferment. Numbers of the noblest families were about to vie with each other in the splendor of their parties, and the Lady Onesta, being resolved not to be outshone by her acquaintance, insisted that Roderigo should exceed them all in the richness of their feasts. For the reason above stated he submitted to her will; nor, indeed, would he have scrupled at doing much more, however difficult it

might have been, could he have flattered himself with a hope of preserving the peace and comfort of his household and of awaiting quietly the consummation of his ruin. But this was not the case, inasmuch as the arrogant temper of his wife had grown to such a height of asperity, by long indulgence, that he was at a loss in what way to act. His domestics, male and female, would no longer remain in the house, being unable to support for any length of time the intolerable life they led. The inconvenience which he suffered, in consequence of having no one to whom he could intrust his affairs, it is impossible to express. Even his own familiar devils, whom he had brought along with him, had already deserted him, choosing to return below rather than longer submit to the tyranny of his wife. Left, then, to himself, amidst his turbulent and unhappy life, and having dissipated all the ready money he possessed, he was compelled to live upon the hopes of the returns expected from his ventures in the East and the West. Being still in good credit, in order to support his rank, he resorted to bills of exchange; nor was it long before, accounts running against him, he found himself in the same situation as many other unhappy speculators in the market. Just as his case became extremely delicate, there arrived sudden tidings, both from the East and West, that one of his wife's brothers had dissipated the whole of Roderigo's profits in play, and that while the other was returning with a rich cargo uninsured, his ship had the misfortune to be wrecked, and he himself was lost."

Belphagor fled and, having suffered much from his pursuers, finally escapes, and at the end of the novel is having a rather good time at the court of the King of France, where he has entered into possession of the daughter of the King and is attracting much appreciated attention from friends, relatives, courtiers, physicians and the clergy by the acts which he causes her to perform. An Italian to whom Belphagor had confided his secret comes to Court and recognizes the particular devil's activities. He tries to persuade Belphagor to leave his victim, but the demon refuses absolutely. Finally the Italian, catching Belphagor unawares, calls out that his wife is coming after him. With a shriek, the poor devil abandons his victim and is glad to find his way back to hell.

During the first half of the sixteenth century there are a whole series of Italian novelists, each one of them the writer of many novels. One of the earliest of these is Firenzuola, who is said to have been a monk and who was a scholar, for among his collected works are a translation of "Apuleius'

Golden Ass," treatises on animals, two comedies, as well as critical and literary work of other kinds. After him came Cinthio, who wrote "Hecatomithi or Hundred Fables." He was a very prolific writer, perhaps the most popular in his own time, with recurring periods of popularity since. His praises were celebrated by nearly all the scholars of the period. His writing was vivid but daring, and the style shows the beginning of that degeneration, from over-consciousness of effort to make it scholarly, so often characteristic of a period when genius is giving place to mere talent. One of his stories furnished the incidents for Shakespeare's "Tragedy of Othello," and this has given Cinthio a place in the commentators on Shakespeare. Another of the Italian novelists whose memory has been frequently renewed for a similar reason was Matteo Bandello, who is often spoken of as the best from a literary standpoint, as he is the most voluminous of the Italian novelists of this period. He is almost the only one of them, besides Boccaccio, known beyond the confines of Italy, and though he was a priest and afterwards a bishop, his stories are as immoral as those of the other novelists of the time.

Indeed, the most important characteristic of all this novel-writing in Italy is that most of the stories were quite without moral qualities, not a few of them were licentious and some of them made their appeal mainly through the liking for descriptions of cruelty to which mankind is apparently always attracted. In our time the corresponding reading is the daily newspaper. The stories of the crime and cruelty of the day before that are told each morning are about of the average length of these *novelle* as written by the Italian novelists of the Renaissance. There is the same demand for them and they are just as much talked about. For literary quality the novels are infinitely higher than our modern newspaper stories. The interesting thing about these novels of indecency and cruelty is that the claim of their authors at least was that they were written in order to bring about reformation and the correction of evil by spreading the knowledge of it and so making people realize its hideousness. Whenever any excuse is given for our publication of the cruel and immoral details of crime in our newspapers, it follows this same specious line of reasoning. Not a few of the writers of the popular novels were clergymen. Bandello was made a bishop, yet continued his writing of novels. It is perfectly possible for good, well-meaning men at any time to be mistaken in the accomplishment of a purpose, and popularity was as great a bait as the making of money is in our time.

One of the most interesting contributions to Italian prose at this time is the "Autobiography" of Benvenuto Cellini, which finds its place very properly after the fiction of the period. The book has been famous in the modern time, particularly since Goethe translated it, and has gone through many editions in nearly every language in Europe. Long ago, Walpole pronounced it "more amusing than any novel," and it is probably rather as fiction than as genuine autobiography that it must be judged. The style is simple, direct, straightforward, and the wonderful romance has great historical value, for Cellini was in contact with most of the great men and many of the higher nobility of his time, and he has used his experiences as the groundwork of the story. It is hard to tell now how much of it may be true, for Cellini's great works of art would seem to contradict it, in so far as it represents him as a frequent brutal murderer, while the amount of labor that he must have given to the many works we have from him would seem to make impossible that he should have spent quite so much time as his life would hint in light living and idleness, while the affection of his contemporaries and their respect for him in his declining years would seem to be further contradiction. He was evidently one of those men who like to be thought worse than they really are and like so many of the artists of all times who are anxious to produce the impression that their works were flashes of genius and not the result of careful patient labor as well.

One of the books that had a very wide influence at this period and which deserves much more than Benvenuto's romance to be thought typical of the time is Baldassare Castiglione's "*Cortigiano,*" in which the author depicts the ideal courtier or gentleman of the time. The method of presentation is by a series of conversations held at the Court of Urbino among the distinguished persons who frequented it in the time when most of the best-known characters of the Renaissance found their way occasionally up to the little hill town. Castiglione's standard for the gentleman is very high, not only in personal conduct, but especially in intellectual accomplishment. His purpose to draw the picture of a scholar-gentleman, the ideal of an accomplished knight, seemed to his contemporaries to have been successfully fulfilled. The book was widely read. It influenced not only Italy and France and the Latin-American countries, but above all affected the English deeply. Mr. Courthope says that, "Carried to the North of Europe and grafted on the still chivalrous manners of the English aristocracy, the ideal of Castiglione contributed to form the character of Sir Philip Sidney. Augustus Hare in his "Ladies of the Italian Renaissance" (New York, 1904) says:

"Spenser declared that the aim of his book is the same: 'To fashion a gentleman in noble person, in virtuous and gentle discipline.' We might fill a volume with instances of the marvellous influence which the work of Castiglione had upon Elizabethan literature, as we hear it echoing through the sonnets of Shakespeare, Spenser's hymns 'Of Heavenly Love,' Ben Jonson, Marlowe, Burton, the poets and early dramatists, even the grave Ascham; and, amongst later writers, Shelley's 'Hymn to Intellectual Beauty' is steeped in the same Italian Platonism."

As a rule, indeed, it may be said that what was best in the literature and art of the Italian Renaissance had a much wider influence than the worse elements in it. It is only in after-times that many of the unfortunately too human contributions to the intellectual life of this period have been revived among scholars and have come to be looked upon as expressive of the spirit of the time. In every movement there are always the lesser men whose notes are discordant and who exaggerate the significance of their own ideas and often exhibit the worst side of human nature. To conclude from them, however, as to the real temper of the time and its influence would be a sad mistake. Castiglione meant ever so much more in the Europe of his day than Cellini. The

"Courtier" sank deep into the minds of poets, artists and literary and educated folk of all classes and aroused what was best in those who were influencing their generation. The "Autobiography" was read much more widely, but mainly by people whose influence over others was to be slight, while the poets and writers and artists did not take it very seriously, but spent a leisure hour or two over it as over any other romance, and turned to their work again.

CHAPTER III

FRENCH LITERATURE

The French literature of Columbus' Century is but little, if at all, below that of Italy in world influence and interest. It was ushered in by that alluring character, the vagabond poet, Villon. He was twenty the first year of our century, and having, providentially for the world of literature, escaped hanging, wrote poetry that has always attracted the attention of poets of every land, and besides has had a popular vogue whenever men have looked beyond their own time and country for literary interests. Few poets of modern times have had among the educated of all countries so many ardent admirers—devotees they might well be called—as Villon. The power of expression of the Renaissance that was just opening was incarnate in him, and no one has ever said better what he sang, though his message was limited enough. His "Ladies of the Olden Time," probably addressed in its epilogue to Prince Charles of Orleans, his poetic contemporary, to whom it is said that he owed his being saved from hanging, is the best known, and is a typical example of his work which reveals the reason for its enduring qualities:

"Say where—in what region be
  Flora that fair Roman dame,
Hipparchia where, and Thais, she
  Who doth kindred beauty claim?
  Echo where? who back the same
Voice from lake and river throws,
  Lovely beyond human frame:
But—where are the last year's snows?

* * * * * *

Queen Blanche, white as lily is,
  Who used to sing with siren strain;

Bertha, Alice, Beatrice,
  Ermengarde who held the Maine,
  Joan, blessed maiden of Lorraine,
At Rouen burnt by English foes,
  Where are they, O Virgin Queen?
But—where are the last year's snows?

Prince, nor in a week or year
  Bid me where they be disclose,
Lest you still this burden hear,
But—where are the last year's snows?"

With Villon came Prince Charles of Orleans, of whom we would probably know very little except for the fact that twenty years of imprisonment in an English prison gave him the opportunity for devotion to poetry. His beautiful lines on the death of his wife are a *chef-d'œuvre* of mourning poetry and one of the gems of literature. The Prince's appeal to Death as to what has made Fate so bold as to take the noble Princess, who was his comfort, his life, his good, his pleasure, his richness, demanding why it had not rather taken himself, has been often translated. There is another of his little poems addressed to her which has often been quoted and yet cannot be quoted too often:

"How God has made her good to see!
  So holy, full of grace, and fair;
For the great gifts that in her be,
  All haste her praises to declare.

Of her, what soul could weary be?
  Each day her beauty doth repair.
How God has made her good to see!
  So holy, full of grace, and fair.

So hither, nor beyond the sea,
  No damsel nor dame I know,
  Who can like her all graces show;
Only in dreams such thought can be—
How God has made her good to see!"

One of Clement Marot's shorter poems contains his formula for what constitutes happiness in life. It is the same formula that has been in the mouths of all the poets at all times who have cared to express themselves on the subject, though some critics have been unkind enough to say that it was not always in their hearts—"Happy the man whose mind and care a few paternal acres share." Marot goes somewhat more into detail. His poem is an anticipation of the sonnet of the great master printer of Antwerp, Christopher Plantin, at the end of this century. Because of its many associations it deserves a place here:

> "This, Clement Marot! (if you wish to know)
> Can upon man a happy life bestow.
> Goods you don't earn, but by bequest acquire,
> A pleasant wholesome house and constant fire.
> Hated by none, yourself devoid of hate,
> And little meddling with affairs of state:
> A wise and simple life, true friends, and like
> A good plain fare, with nought the eyes to strike,
> With all in easy converse to combine:
> Pass careless nights, not careless made by wine;
> A wife to have—kind, joyous, chaste and bright;
> And well to sleep, which shorter makes the night:
> Contented with your rank, nor wish for higher;
> And neither death to fear, nor death desire
> This, Clement Marot! (if you wish to know)
> Can upon man a happy life bestow."

Francis I was himself a poet, and his poems and letters were collected and published in the first half of the nineteenth century. "In default of a great talent, he had a real passion for poetry," says Imbert de Saint-Amand, and like the Trouvères he liked to make use of the lyre and sword by turns. Sainte-Beuve in his *"Portraits Littéraires"* declared that "Francis I, from the day he ascended the throne, gave the signal for this puissant labor which was to aid in expanding and definitely polishing the French language. Thanks to the impulse given by him from above, there was soon a universal clearing of the ground all around him." The verses in which he formulated one of the most melancholy and most striking judgments that ever monarch pronounced on the nothingness of the grandeurs of this lower world, deserve to be quoted:

> "The more my goods, the more my sorrow grows;
> The more my honors, less is my content;
> For one I gain, a hundred I desire.
> When nought I have, for nothing I lament;
> But having all, the fear doth me torment,
> Either to lose it or to make it worse.
> Tired, full well may I my misery mourn,
> Seeing I die of envy but to have a good,
> Which is my death and I esteem it life."

The most important writer in France at this time, however, was undoubtedly Francis' sister, Margaret of Navarre or Angoulême. Her "Heptameron" has been widely read in practically every generation since her own, and though some doubt has been thrown on her authorship of it, it is probable that the age-long attribution to her must remain. The book is about as evil in its influence as any that was ever written. Its author was undoubtedly a saint. She had the best of intentions, and her work illustrates how easy it is for good intentions to go wrong. Hell was paved with good intentions then as now. As I have suggested in the chapter on Some Great Women of the Century, a corresponding mistake is being made by many good women now in the crusade of providing sex information as a protection for the young. Margaret's work is one of the best specimens of French prose of the time. Saintsbury, in his volume on "The Early Renaissance," calls it a very remarkable book which has, as a rule, been undervalued, "presenting almost equal attractions for those who read for mere amusement, to those who appreciate literature as literature, and to those who like extra literary puzzles of various kinds from authorship to allusion."

Margaret's reputation has suffered more than was deserved from the condemnation of the "Heptameron." Her personality merits to be judged rather from the charming poetry of a mystical character which she wrote. Her book, "Les Marguerites de la Marguerite des Princesses," is too well known to be much more than mentioned here. It has a charming grace and an exquisite delicacy. It is the true index to her character. As Imbert de Saint-Amand has said in his "Women of the Valois Court," "Poetry and religion were her two consolers." Her resolution when she looked at her crucifix and burst into poetry was:

"It is my will and firm intent
To be no more what I have been,
Nor to amuse myself in this poor world,
Seeing the griefs that reign there and abound,
And which by day and night torment my heart."

There are bursts of piety in her collection worthy of her great mystical contemporary, St. Teresa. The following would almost remind one of St. Teresa's cry, "I die that I may die."

"Lord, when shall come the day
I long to see,
When by pure love I shall
Be drawn to Thee?
That nuptial day, O Lord,
So long delays,
That no content I find
In wealth or praise.
Wipe from these sorrowing eyes
The tear that flows,
And grant me Thy best gift,
A sweet repose."

The French poetess, Louise Labé, *la cordière,* the cordwainer's wife, as she was called, in reference to her husband's occupation, deserves a place because she represents at once the opportunities even of the lowly born of her sex for the higher education at this time, and her writings exhibit a natural grace and ardent passion that place them in a high rank of lyric poetry. Poetesses of passion there have been a-plenty since, yet it is doubtful if many of them have surpassed much the French lady of the Renaissance from the middle classes. The sonnet form would seem highly unsuitable to us for such passionate expression, but it was the fashion to use it, and Louise Labé anticipates by some three hundred years Mrs. Browning's use of this form for a very similar purpose. One of her sonnets may very well be read beside some of those of Mrs. Browning.

"As soon as ever I begin to take,
  In my soft bed, the rest which I desire,
  Forth from my frame does my sad soul retire,
And hastes toward thee its eager way to make.
Then in my tender heart, ere I awake,
  The bliss I gain to which I most aspire,
  The bliss for which to sigh I never tire,
For which I weep as though my heart would break.
A kindly sleep, O sleep to me so blest,
  Happy repose, full of tranquillity,
  Grant that each night I may renew my dream.
And if my sad heart, by all love possest,
  Must ne'er be happy in reality,
  Yet while I sleep so let me falsely seem."

The humor of the end of Columbus' Century is very well illustrated in some of the epigrams of Melin de Saint Gelais, like Marot, the son of a poet and brought up in poetic circles, who knew how to write elegant trivialities, or who was, as the French say, *maître en l'art de badiner avec élégance*. Curiously enough, it was he who imported the sonnet from Italy. It had been hitherto unknown to French poets, but was unfortunately, as it must seem to most of us, destined to eclipse the ballades, rondeaux, virelais and other poetic forms that had been for so long in vogue in France. I prefer to quote here two of his shorter epigramatic poems which serve to show how old the new is in wit and humor:

"You find great fault with me, my friend,
Because your neighbor I commend,
  And yet from you all praise withhold:

But say, why should I waste my time
Praising your merits or your rhyme?
You do it best a hundredfold."

The second treats in vivid satire the eternal question of the honor due the scholar:

"Friend! tell of these two things the just degree,
Great learning or great wealth; the better which?
I know not. But the learned still I see
Paying great court and homage to the rich."

The "*Défense et Illustration de la Langue Française,*" which is the manifesto of the Pleiades, was written by Joachim du Bellay just at the end of Columbus' Century and published in February, 1550, according to the modern calendar, but 1549 in the old, which made the year begin on Lady Day (March 25). With that a group of men, most of them about twenty-five years of age, entered upon a new period of French literature. A sham middle age had been lingering on,—the mere remnants and echo of the Romance of the Rose, and now a new spirit was to enter into French literature. The genius of it had all been cradled in Columbus' Century. The poets of the Pleiades came to teach the modern note. Pierre Ronsard was the greatest of them, and in five years all Europe knew something of the new birth in French poetry. Two such very different minds as those of Queen Mary and Queen Elizabeth of England became ardent admirers and indeed almost patrons of the new poets, and particularly of Ronsard. Many of the poems had been conceived, and some of the best were issued within a year or two after the close of what we have called Columbus' Century. The little lyric "*Mignonne! Allons voir si la Rose,*" which has always been a favorite in every generation with any poetry in its soul, was known throughout Europe within a year of its publication in 1552.

There is another ode of Ronsard's of much more serious vein which serves to show that the poets of the older time could think of other things besides love and beauty and the rose, and face the sterner problems of their time and sing the meaning of them with poetic depth. Because its subject is quite as eternal in its interest as that of the love poems and has perhaps more significance for our time, I prefer to quote it:

"Why, poor peasant, should you dread
Sceptered hand or crowned head?
They shall soon—slight shades—be sent
The number of the dead t' augment.
To all mortals—dost not wis?—
Death's wide gate e'er open is.
There th' imperial soul must wend,
There as speedily descend,
Charon's fatal boat to find,
As the soul of serf or hind.

Courage you who delvers are;
These great thunderbolts of war
No more than yourselves shall go
Armed with breastplate there below,
As though battling as of yore.
Mail shall profit them no more—
Lance and shield and battle blade—
Than shall you your scythe and spade.

Rhadamanthus, judge severe,
Be you sure no more will fear
Armor in his dread abode
Than the peasant's wooden goad;
Nor does more or less admire
Richest robe or mean attire,
Or the gorgeous pageantry
Where the king in state doth lie."

Joachim du Bellay, snatched away at the early age of thirty-five after having passed many years in illness, owed his inspiration to write poetry to his reading of the classics. It was he who wrote the proclamation of the Pleiades which I have already mentioned. Had his fate been happier, doubtless there would have been many great poems from him and he would have been a serious rival of his friend Ronsard. As it is, there are from his pen some poems that will always have an interest for the French and for the educated in every country. One of the more serious deserves to be quoted.

"If, then, our life is shorter than a day
Lost in all time; if the revolving year
Hurries our days past hope to reappear;
If all things born must fail and pass away—

What, O my prisoned soul, dost dream of? say!
Why so much love our days of darkness here,
If to take flight to an abode more dear,
Well-feathered wings you on your shoulders sway?

There is the good which ever soul desires,
There the repose to which the world aspires,
And there is love and pleasure evermore.

There, O my soul, rapt to the highest skies,
You will in actual substance recognize
Th' ideal beauty which I now adore."

In the French prose of our century there is Comines at the beginning, a not unworthy fourth in that wonderful quartette of French historical writers which began with Villehardouin at the end of the twelfth century, gave us Joinville in the thirteenth, Froissart in the fourteenth and Comines in the latter half of the fifteenth. He is one of the historians who will ever be read; with a political sagacity and philosophic outlook on history that give him a place of his own. He was no mere chronicler, and the individuality of his work, that quality by which history is raised into literature, sets him far above many a modern writer of what is called history, though it is merely a collection of materials for some historian who will inform them with a soul. At the end of the century there was Michel de L'Hôpital, whose orations, numerous memoirs and special treatises mainly connected with explanations of law have the defects of legal writing at all times, and yet exhibit a power of expression that has seldom been equalled at any time.

After Rabelais, undoubtedly the greatest of the prose writers of the time was Amyot, whose first work, a translation of a Greek romance, "Théagène et Chariclé," was published in 1546, and who, in the subsequent years of a life that reached almost to ninety, published his translations of Plutarch, a work for which he received the designation of preceptor of the royal children and the Bisopric of Auxerre. He was the grand almoner.

Amyot's translation of Plutarch has been declared practically a new and original work. Montaigne said of it:

"I am grateful to Amyot above all things for having had the wit to select so worthy and so suitable a work to present his country. We ignorant folk had been lost, had not this lifted us out of the mire; thanks to it, we now dare speak and write, and ladies give lessons out of it to school-masters; 'tis our breviary." For English-speaking people its significance is greatly enhanced from the consideration that it was really Amyot's version which, in the English dress of Florio, became Shakespeare's Plutarch. Anyone who knows how closely Shakespeare followed his Plutarch will appreciate, then, what an important influence on world literature Amyot was destined to have.

This translation of Plutarch has come to be looked upon as probably one of the best translations ever made. It has sometimes been said that "to translate is to betray" and that the best translations are at most tapestries seen from the wrong side, but Amyot's "Plutarch" must be considered an exception to this rule. Erasmus said of Linacre's translation into Latin of Galen that it was better than the original Greek. Amyot's "Plutarch" has become a French classic, though the Greek author was by no means classic in the limited sense of the word in the original. Racine would read no other because he thought there was nothing to equal it in French. Amyot's works are a treasure house of the French language, and modern French critics often regret that many of his expressions have been allowed to sink into desuetude.

France glories in the possession of another of these striking characters of the Renaissance period, Rabelais, about the estimation of whose character and place in history, just as with regard to Machiavelli, the world has not quite made up its mind. There is no doubt at all as to his genius, nor his breadth of view and comprehensive grasp of the knowledge of his time, nor of his ability as a vigorous writer, though his crudities of style and frequent indulgence in vulgarity have made him a writer largely for men, and even many of these have been deterred from the study of his writings because of the glaringness of these faults. His defects were largely those of his time, for they were accustomed to call a spade a spade in the Renaissance. It was not because of looseness of his own life that his crudities of style are so manifest. Careful investigations and research in our time have made it very clear that there are many misunderstandings with regard to his personal character which should be removed. Rabelais ran the whole gamut of life in his time. He was first a friar, then a monk, took his medical degrees at Montpellier, a physician who gained considerable prestige for his knowledge of medicine, a writer of books that were widely read, a scholar whose journeys to Rome gave him a breadth of knowledge unusual even in his time, and the intimate friend of some of the great and good churchmen and literary men of his time.

The old legend which represented him as a gluttonous and wine-bibbing buffoon, wandering in revels as an unfrocked priest, must now be abandoned. His transitions from friar to monk, to physician, were all accomplished with due ecclesiastical permission, and in spite of the freedom of speech and liberalizing tendencies to be found in his writings he never got into serious trouble with the ecclesiastical authorities. Evidently he was looked upon as a genius whose good will might be depended on to keep him from serious heretical divagations, though occasionally his superabundant vital spirit would lead him into expressions that were often indiscreet and sometimes needed correction. His relations with Guillaume and Jean du Bellay and with the bishops of Maillezais and Montpellier, as well as the distinguished jurist, Tiraqueau, furnish most convincing proof of the high regard in which he was held not only by men of his own rank, but by those far above him in power and station—Princes of the Church and patrons of humanism.

In spite of their deterring vulgarity, his works have been much read ever since and are still often in the hands of scholars and those who want to appreciate one phase at least of the true inwardness and all-comprehensiveness of the spirit of the Renaissance. The number of Greek and Latin writers from whom he quotes is very large, and his reading must have been very wide. He seems also to have known some Hebrew. Very few of his contemporaries realized at all that in his writings he had made an enduring contribution not only to French, but to world literature. So good a critic, however, as Joachim du Bellay in the " Defence and Illustration of the French Tongue " alludes to him as the man " who has brought back Aristophanes to life and who imitates so well the satirical wit of Lucian."

The fact that his book should be published at this time without its author incurring serious censure, much less persecution, is a proof that the usual persuasion of many who write on the history of this time that heresy-baiting was a favorite occupation of the Churchmen is unfounded and shows how absurd is the impression entertained by not a few that the slightest imprudence might have even fatal consequences. Men like Étienne Dolet and Giordano Bruno lost their lives at this time on heretical charges, but that was because their writings seemed to the Church, and above all the civil authorities of the time, to undermine authority and to propagate anarchy. This has always been a dangerous suspicion for a philosophic writer to fall under at any time, and is not without its serious dangers, social rather than legal, even in our time. In other matters, however, as the example of Rabelais shows, there was, if not a modern liberty, at least a large tolerance of expression, provided the thoughts were tempered by humor and the character of the writer known to be such that genuine ill-will or anarchic tendencies towards civil and ecclesiastical authorities were not the manifest purpose of the writings.

The interest of our own generation in Rabelais is best illustrated by the foundation in 1902 of the Société des Études Rabelaisiennes at Paris. The organ of the Society, the *Revue des Études Rabelaisiennes,* made its first appearance in January, 1903, and has already added much to our knowledge of Rabelais. It has now been thoroughly demonstrated that Gargantua was a popular and folk-lore character long before Rabelais' time, and that he assumed the character only in order to give popular vogue to his own ideas. In spite of the cruder side of his work he has so much to say that is valuable with regard to education, valuable even for our time, so much of correction of popular errors and emphatic restatement of the philosophy of life by which men may secure their happiness, not through selfishness, but love for their fellowmen, that whenever men think deeply for themselves and do not merely drift in the wake of other thinkers, Rabelais will always attract attention. It is always a good sign when Rabelais becomes popular in France, for men are usually thinking more deeply than before. Like Dante, he is a touchstone of sincerity and honesty of thought and purpose among his countrymen.

Rabelais is a most difficult man to sum up for those who are not French. Saintsbury in his "Earlier Renaissance" has perhaps furnished the best brief appreciation when he said:

"On the pure credit side his (Rabelais') assets are so great that one can only marvel at the undervaluation of them by any competent auditor. . . . You *may* say some things against him, and some of these *some* things truly. But three things will remain. He is (let the competent gainsay it if they dare) one of the greatest writers of the world; he is one of the great satirists of the world; and he is—as not all great writers and very few great satirists have been—one who sincerely and strenuously loved his fellowmen."

In the first paragraph of his "François Rabelais" * (written for the French Men of Letters Series), Arthur Tilley, whose "Literature of the French Renaissance" had shown how competent he was to judge, has summed up the character and place of Rabelais. It is to Tilley that I owe most of the details that are given here, and his paragraph will serve as a fitting conclusion.

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* Lippincott, Phila., 1907.

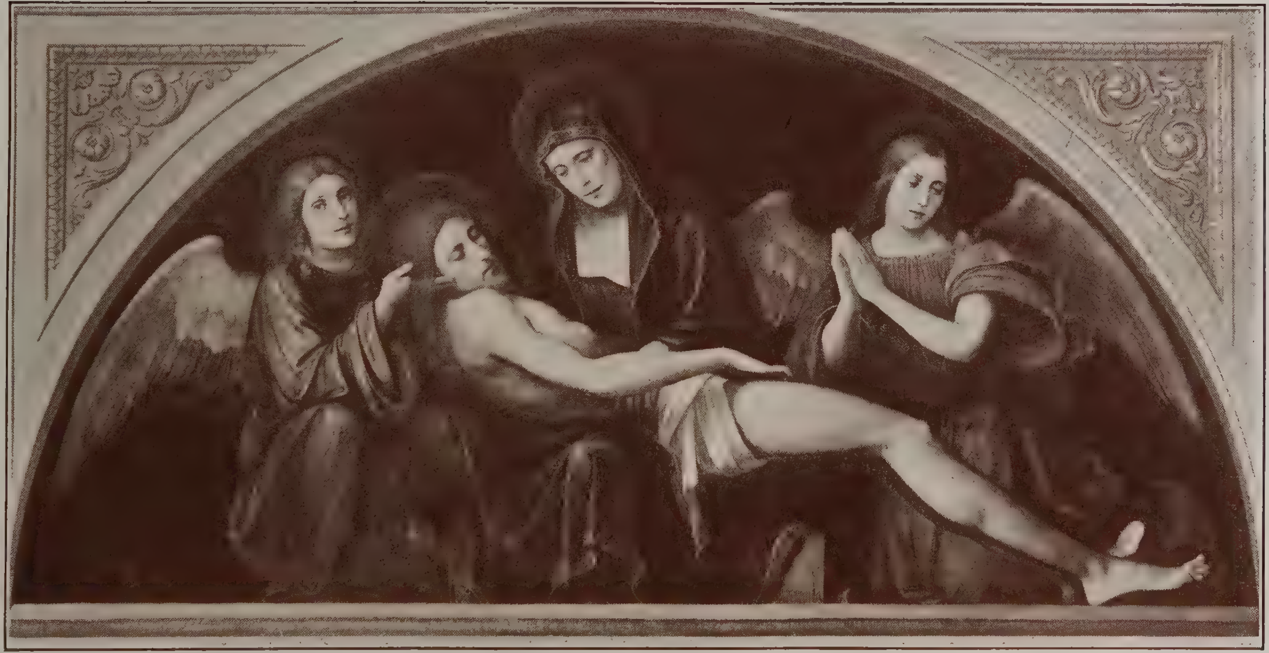
" It is a characteristic of the very greatest writers that they sum up, with more or less completeness, the thought, the aspirations, and the temper of their age, and this not only for their own country, but for the whole civilized world. Of this select band is Rabelais. He is the embodiment not only of the early French Renaissance, but of the whole Renaissance in its earlier and fresher manifestations, in its devotion to humanism, in its restless and many-sided curiosity, in its robust enthusiasm, in its belief in the future of the human race."

CHAPTER IV

SPANISH AND PORTUGUESE LITERATURE

The Spanish literature of the period contains some all-important material of great significance not only for Spanish literature itself, but also for the literature of the world. In the chapter on Women of the Renaissance, I have called attention to the interest of Queen Isabella in things literary, and while she did not produce any formal literary work, her letters have been pronounced by the Spanish Academy classic documents in the Spanish language. The most important contribution to Spanish literature during the century came also from a woman, though she doubtless had as little thought of making literature when she wrote as did the Queen. This was St. Teresa, to whose works serious writers on spiritual subjects in all countries and at all times, often in spite of differences of belief, have turned as classics of spirituality. Her literary work consists of the treatises which she wrote by order of her confessors on mystical subjects and then her many letters. It is these last, particularly, that have been widely read in the modern time and that are world classics in their order. Probably no one has been more misunderstood than St. Teresa. She has come to be considered by many, who, as a rule, know nothing at all of her at first hand, as one of the almost impossible saintly personages whose hours of concentration in prayer and fasting and other mortifications have driven them into states of mind bordering on the irrational, if not frankly hysterical. Indeed she is often considered to be the most striking type of these.

David Hannay, in his "The Later Renaissance" in Professor Saintsbury's series, Periods of European Literature (New York: Scribner's, 1898), who has read her works with care, says: "Her letters, which are not only the most attractive part of her writing, but even the most valuable, show her



FRANCIA, VIRGIN WEEPING OVER BODY OF CHRIST (LONDON) not only as a great saint, but as a great lady with a very acute mind, a fine wit and an abounding good sense. Her own great character is stamped on every line. Nobody ever showed less of the merely emotional saintly character 'meandering about, capricious, melodious, weak, at the will of devout whim mainly.'"

To get the real charm of St. Teresa's writings, one must read her letters, and from those it is almost impossible to take such selections as might be included in the brief space allowed here. Fortunately they have come to us as she wrote them. Fray Luis de Leon was himself literary enough to save them from a worthy father-confessor, who would have "improved upon and polished her periods." The world came near losing the marvellous language of which Crashaw said, "Oh it is not Spanish, but it is Heaven she spoke."

Some idea of her simplicity and power of expression can be appreciated from the "Hymn to Christ Crucified," familiar to English readers in Dryden's version, which has been attributed also to St. Ignatius Loyola and St. Francis Xavier, but which seems more appropriately ascribed to the Seraphic Mother of Crashaw's burning words, "sweet incendiary," "undaunted daughter of desires" and "fair sister of the seraphin." The poem is, no matter who may have been its author, at least a striking example of the style of the time.

"O God, Thou art the object of my love,
Not for the hopes of endless joys above,
Nor for the fear of endless pain below
Which those who love Thee not must undergo:
For me, and such as me, Thou once didst bear
The ignominious cross, the nails, the spear,
A thorny crown transpierced Thy sacred brow,
What bloody sweats from every member flow!
For me, in torture Thou resign'st Thy breath,
Nailed to the cross, and sav'st me by Thy death:
Say, can these sufferings fail my heart to move?
What but Thyself can now deserve my love?
Such as then was and is Thy love to me,
Such is, and shall be still, my love to Thee.

Thy love, O Jesus, may I ever sing,
O God of love, kind Parent, dearest King."

The most original contribution of Spain to pure literature were the Tales of Chivalry, which became so popular at the end of the fifteenth century. *"Amadis de Gaul"* is claimed by the French, but the French original has been lost and the Spanish one is not only well known, but characteristically Spanish, partaking of the very temper of the people. The first known edition is early in the sixteenth century, and within fifty years Spain produced twelve editions of it. A whole series of books of similar kind followed it. Many of these were totally lacking in literary quality, but they achieved popularity. Our own first novelists were literary folk. They have been succeeded by hack writers, who watch the fashion of the moment and make ever so much more money and sell ever so many more copies than did the great novelists. Something like this happened in Spain. These tales of chivalry have sometimes been made a matter of reproach to the intelligence of the Spaniards of the time, but then what shall we say of our own much more widespread occupation with stories if possible more trivial and absurd?

We are not without tributes from distinguished men to the interest they found in some of these stories. The *"Palmerin de Inglaterra,"* which Cervantes' priest "would have kept in such a casket as that which Alexander found among Darius' spoils intended to guard the works of Homer," attracted so much attention from Edmund Burke that he avowed in the House of Commons that he had spent much time over it. Dr. Johnson confessed to having spent the leisure hours of a summer upon *"Felixmarte de Hircania." "Amadis de Gaul,"* classed by Cervantes' barber as "the best in that kind," is perhaps the only one of the tales of chivalry that a man need read. The usual assumption that it is a story of France, because of the word Gaul, is quite mistaken. Amadis is a British Knight, Gaul stands for Wales, Vindilisora is Windsor, while Bristol becomes Bristoya. The action occurs "not many years after the Passion of our Redeemer." There are marvellous adventures, something happens on every page, combats with giants, magical spells of all kinds, miracles, hairbreadth escapes, last-moment rescues, till fidelity is rewarded and Amadis marries Oriana, daughter of the King of Britain, and they all live happy ever after.

After the Tales of Chivalry came the Novelas de Pícaros, picaresque novels we have called these Tales of Roguery in English. The two modes of fiction represent the opposite extremes. The tales of chivalry were almost entirely imaginary. The picaresque novels were rather naturalistic studies from low life. The first of these was the "*Celestina*," but the one that was most influential is the "*Lazarillo de Tormes*," which curiously enough has been attributed, though on dubious evidence, to the famous Diego Hurtado de Mendoza and also to Fray Juan de Ortega of the Order of St. Jerome. The stories represent the ever-recurring tendency of mankind to be interested in a rogue, to be ready to laugh at his rascalities and especially his capacity for cheating his betters that has been used so effectively by Plautus and was the germ of the idea in the plot of Gil Blas and Scarron and probably suggested Shakespeare's "Jack Falstaff." There are phases of our modern fiction that display the same tendency.

Fitzmaurice Kelly in his "Spanish Literature" (Appleton's Literatures of the World Series, New York, 1898) said of the "*Lazarillo de Tormes*":

"After three hundred years, it survives all its rivals, and may be read with as much edification and amusement as on the day of its first appearance. It set a fashion, a fashion that spread to all countries, and finds a nineteenth century manifestation in the pages of 'Pickwick'; but few of its successors match it in satirical humor, and none approach it in pregnant concision, where no word is superfluous, and where every word tells with consummate effect. Whoever wrote the book, he fixed forever the type of the comic prose epic as rendered by the needy, and he did it in such wise as to defy all competition."

By a very curious contrast, the literature of Spanish origin from this century which has most influenced the world, being translated into all the languages and read and studied deeply, is exactly the opposite pole of these prose epics. For the world's best-known writers on spirituality and mysticism have been Spaniards, the greatest of them lived at this time and they are still being read everywhere, edition after edition appearing in many languages. The great names among the mystics whose writings were either completed during our century, or at least the foundation for whose work was laid because their authors came to their maturity during this time, were John of Avila, Luis de Granada and Luis de Leon. John of Avila is the best known of these and occupied something of the position of master to the others. His most famous book, "The Spiritual Treatise," is still widely read in religious institutions and is familiar to all those who have made any serious study of the religious life. As there are and have been ever since his time hundreds of thousands of religious in the world, many of them representing the highest culture and good taste, "the apostle of Andalusia," as he was called, has had a large circle of chosen readers for all these centuries. His book is written with an ardent eloquence in the deeply spiritual passages, and as Hannay has said, "has always a large share of the religious quality of unction." There are many profoundly intelligent and seriously thoughtful men of our time who consider it one of the most wonderful books ever written.

Luis de Granada's book, "The Guide for Sinners," was translated into all the languages of Europe and read not only by the clergy, but by the people. His book of "Prayer and Meditation on the Principal Mysteries of Faith" was much more in the hands of the clergy and religious, but was scarcely less famous. Luis de Leon's "Perfecta Casada" gained a wide reputation, and his other books on "The Names of Christ" and "The Book of Job" had a place in every important religious community in Europe.

Two names in the Spanish poetry of this period are immortal in Spain, and their writings are familiar to the students of literature the world over. They are Boscan and Garcilaso de la Vega. The younger man, Garcilaso, sent Castiglione's *"Il Cortigiano"* to Boscan and suggested its translation into Spanish. Fitzmaurice Kelly, in his "Spanish Literature," has said, "Though Boscan himself held translation to be a thing meet for 'men of small parts,' his rendering is an almost perfect performance." This led Boscan to put into Spanish form many other Italian pieces, not so much by translation as by imitation more suited to the genius of the Spanish language. Not a great genius, not a lordly versifier, endowed with not one supreme gift, Boscan ranks as an unique instance in the annals of literature by virtue of his enduring and irrevocable victory.

Garcilaso, his young friend, is far ahead of him in poetic genius. He was a soldier-poet, "taking now the sword and now the pen," as he said himself, and he died at the early age of thirty-three. His death occurred as the leader of a storming party in romantic circumstances, under the eye of the Emperor and the army. The first to climb the breach, he fell mortally wounded into the arms of the future translator of Ariosto and of his more intimate friend, the Marques de Lombay, whom the world knows best as St. Francis Borgia. "His illustrious descent, his ostentatious valor, his splendid presence, his seductive charm, his untimely death: all these, joined to his gift of song, combined to make him the hero of legend and the idol of a nation. Like Sir Philip Sidney, Garcilaso personified all accomplishments and all graces." Curiously enough it is not the martial but the pastoral that Garcilaso sings and "the light that never was on land or sea," of peace with poetic melancholy, that may so easily be the subject of criticism, yet has always been the favorite retreat of a great many poets at many recurring times.

At the Western end of the Spanish Peninsula the Portuguese, distinct in language, had a literature of their own which reached its perfection just after Columbus' Century, but the promise of which can be seen during our period. The greatest of their poets is Camöens, whom the German critic Schlegel did not hesitate to place above not only his two great contemporaries of the sixteenth century, Ariosto and Tasso, but above all the modern epic poets and even above Virgil. His poem has been read in translation in all the languages of Europe. While it was not written in what we have called Columbus' Century, the poet had given evidence of the greatness of his genius before 1550, and some of the sonnets of his early years have deservedly been looked upon as worthy perhaps of a place among the greatest examples in that form. Mrs. Browning's reason for calling her "Sonnets from the Portuguese" by that name was that probably the most beautiful love sonnets in the world had been written in that language. The Portuguese language was given the form in which it was to survive at this time, and it is always when a language is being formed that somehow geniuses come to round out its powers of expression and at the same time give it the form which it is to maintain partly as a consequence of their genius having expressed itself in it in certain enduring modes.

Some of the shorter poems written by Camöens when he was a young man between twenty and twenty-five, that is, before the close of Columbus' Century, are so characteristic of the *vers de société* at all times, and yet are such delightful bits of versification with here and there a touch of charming poetic quality, that they have more than passing interest for the modern time. I venture to quote several of them to illustrate their variety, but at the same time because, though all are attributed to Camöens, it is doubtful whether some of them were not written by others and afterwards transferred to him because of his greater fame. They illustrate very well the poetic vein of the Portuguese of the time, though ordinarily it is not assumed that Portugal was touched by the spirit of the Renaissance to any great degree or that her literature is of any significance. Most of them are with regard to love, though not all of them are as serious as the rondeau so often quoted:

"Just like Love is yonder rose,
Heavenly fragrance round it throws,
Yet tears its dewy leaves disclose,
And in the midst of briars it blows,
Just like Love.

Cull'd to bloom upon the breast,
Since rough thorns the stem invest,
They must be gather'd with the rest,
And with it, to the heart be press'd,
Just like Love.

And when rude hands the twin-buds sever
They die—and they shall blossom never,
—Yet the thorns be sharp as ever,
Just like Love."

In lighter vein is the canzonet to the lady who swore by her eyes, a custom which was rather common according to the tales of chivalry so popular shortly before this time. The first and last stanza will give a good idea of it:

"When the girl of my heart is on perjury bent,
The sweetest of oaths hides the falsest intent,
And Suspicion, abash'd, from her company flies,
When she smiles like an angel—and swears by her eyes.

Then, dear one, I'd rather, thrice rather believe
Whate'er you assert, even though to deceive,
Than that you 'by your eyes' should so wickedly swear,
And sin against heaven—for heaven is there!"

At times the Portuguese poet could be rather serious. The two stanzas from the beginning of a canzonet, which contrasts the making of money with the doing of good as the proper aim of life, has often been quoted:

"Since in this dreary vale of tears
No certainty but death appears,
Why should we waste our vernal years
In hoarding useless treasure?

No—let the young and ardent mind
Become the friend of humankind,
And in the generous service find
A source of purer pleasure!"

The poet is said to have fallen in love with a maid of honor at the court far above him in rank. For this impudence he was banished from court, and unable to live so near, yet so far, resolved to go as a soldier to Africa. Somehow or other a last meeting with her (she died at the early age of twenty) was managed before his departure, and he discovered in her eyes, as she bade him good-bye, the secret that she was as deeply in love as he. He went where duty called, fought bravely, losing the sight of an eye in one of the battles, and, loaded with martial honor, was permitted to return to court. When he returned, his inamorata was no more. The sonnet written when he learned the sad news is more artificial perhaps than he would have written in his maturity, but it and others gave Portuguese literature the fame for love sonnets which suggested to Mrs. Browning the title " Sonnets from the Portuguese " for her love poems:

" Those charming eyes, within whose starry sphere
Love whilom sat, and smil'd the hours away,
Those braids of light that sham'd the beams of day,
That hand benignant, and that heart sincere;
Those virgin cheeks, which did so late appear
Like snow-banks scatter'd with the blooms of May,
Turn'd to a little cold and worthless clay.
Are gone—forever gone—and perish here,
—But not unbath'd by Memory's warmest tear!
—Death! thou hast torn, in one unpitying hour,
That fragrant plant, to which, while scarce a flow'r,
The mellower fruitage of its prime was given;
Love saw the deed—and as he lingered near,
Sigh'd o'er the ruin, and return'd to Heav'n! "

The literature of the Spanish peninsula was to have its flourishing period in the century following that we have called after Columbus, but there is enough of enduring literary products to show that men's minds were deeply affected by the great spirit of the time and to lay broad and deep foundations for the Golden Age of Spanish literature that was to follow so soon.

CHAPTER V

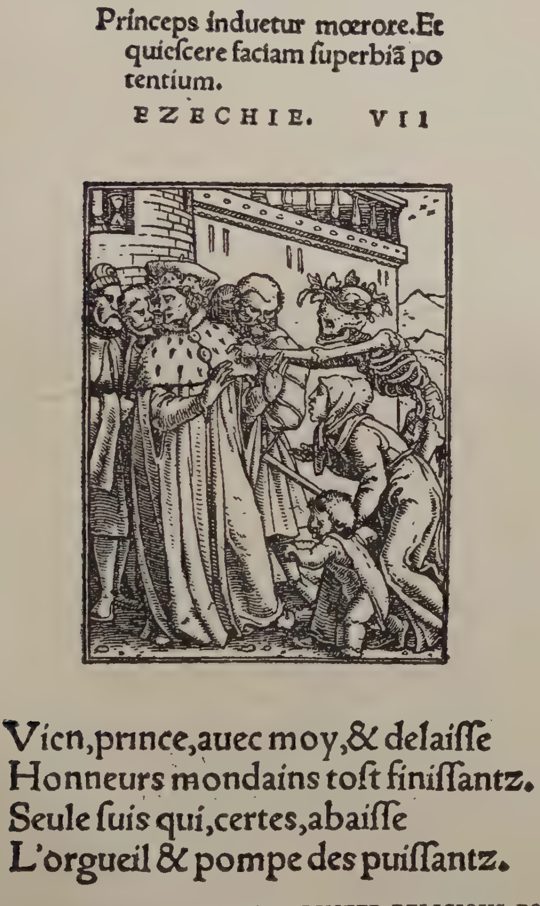
ENGLISH LITERATURE

The English literature of Columbus' Century obtained some of its triumphs very early in the period in a literary department, that of dramatics, in which other nations achieved little success. England in the latter part of the fifteenth century produced a series of plays whose high place in literature was only recognized properly during the past two or three generations. Ordinarily it is assumed that dramatic literature of serious significance did not develop in any modern language until much later than this time. Indeed, as a rule, the English drama of Shakespeare's time is supposed to be the first development of any importance in this department. The Spanish drama developed almost immediately after our Shakespearean period, the French came half a century later, and curiously enough Italy and Germany did not develop a national drama until the nineteenth century. The mystery and morality plays of the latter half of the fifteenth century in England have been revived in recent years and have illustrated beyond all doubt the genius of their authors and the fine evolution of drama at this time. Specimens that have been played in many places, in public performances, have proved to possess a gripping power over audiences, surpassing the dramatic literature of our own time, and the dramatic ability and genius of the men who wrote them has now come to be generally recognized. "Everyman," for instance, has been played to crowded houses in many of the large cities of the country, audiences listening intently for the two hours without an intermission and then paying the highest possible tribute by going out always in silence. The story is only a dramatic rendition of the place in life of the "four last things to be remembered"—death, judgment, heaven and hell—of interest to every man. Such a subject would seem to be quite out of harmony with the temper of our time and above all with the mood in which our people attend the theatre. The man who wrote it and was able to give it such enduring interest was a dramatic genius of the first order, for he was able to take the familiar things of life, even those to which men are not prone to give much attention, and make them compelling.

Mystery plays have come to have much more significance for us since the wide popularity of the Passion Play at Oberammergau. Thousands of people go up to the little village of scarcely more than a thousand inhabitants every ten years to see and hear the simple villagers tell the old, old story of the Passion and Death of Him that died on the Cross for us. Some, perhaps, of the attendance is due to the fact that it has become a fad to go, yet most of it is a real act of devotion, but to a shrine that is literary and truly dramatic as well as religious. From all over the world people have flocked to it and have confessed the dramatic force of the story in its simple setting in such a way as to make us realize what a powerful appeal the old mystery plays must have had for the people of the later Middle Ages when they came to their perfection of presentation. The appeal that the Passion Play had to the older folk, the Nativity Plays had for the children, though also for their elders and especially the women.

It is exactly during Columbus' Century that these mystery and morality plays reached their highest development and greatest perfection of expression and presentation. In England this development proved to be the fertile field out of which sprang the great Elizabethan dramatic literature. There are all the elements of a great dramatic literature in them. There is simplicity and directness with the presentation of subjects that have the highest appeal and yet very humanly done, so that wit, and above all, humor, has its rolê, and the problems concerned are those which interest all mankind. So little is known about this phase of dramatic literature, though it represents such a charmingly simple expression of dramatic poetry, containing a lesson of sincerity, naturalness and occupation with the higher things, which our generation needs above all in order to be lifted out of the rut of over-attention to problem plays, that some review of it seems necessary not only for a complete picture of the literature of Columbus' time, but also for the sake of the enduring social significance of this early dramatic literature.

While we have greater examples of this mode of literature from England, in nearly every country in Europe the Passion Plays had a wonderful development toward the end of the fifteenth century. They were particularly striking, both in their literary value and their presentation in the Teutonic coun-



Princeps induetur mœrore.Et
quieſcere faciam ſuperbiā potentium.
EZECHIE. VII

Vien,prince,auec moy,& delaiſſe
Honneurs mondains toſt finiſſantz.
Seule ſuis qui,certes,abaiſſe
L'orgueil & pompe des puiſſantz.

PAGE FROM EARLY POPULAR PRINTED RELIGIOUS BOOK
(WOODCUT)

tries and in England. There was a whole series of plays in England, many of which have come down to us. There is question whether "Everyman" was originally of Dutch or of English origin. The first production of it was as a translation of the Dutch "*Elkerlijk*." In Germany, the period in which the Passion Play reached its highest development was from about 1450 to 1550. The great Frankfurt Passion Play, the Alsfelder and the Friedburger plays came at this time. Many other towns, however, had their special Passion Plays written for them and presented in their own way. There was the Vienna Passion, the St. Gall Passion and the Maestricht Passion. But there were Passion Plays also at Eger, at Augsburg, Freising and Lucerne. From very early times Passion Plays were given in various parts of the Tyrol, always attracting the deep attention of the people, and it is here that the single example which has survived still serves to show us how genuinely dramatic and how powerful in their appeal were these plays.*

Dodsley's collection of Old English Plays, which, in its fourth edition as edited by W. Carew Hazlitt (London, 1874), contains a number of old plays little known, is particularly rich in material from this century of Columbus. The series of morality plays, "The Interlude of the Four Elements," "Everyman," "The Pardoner and the Friar," "The World and the Child," "Hick's Corner," "God's Promises," and the "Four P's," are typical examples. They all show the true dramatic spirit, and while lacking the theatrical technique of modern plays, are almost infinitely superior in their expression of the realities of human interest and their revelation of the depths of human sympathy to the presentation of superficialities which now pass for drama.

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*It is almost amusing to be told that knowledge of the Scriptures was kept from the people at this time, before the Reformation, when these popular plays to which all the countryside flocked, and in which so many took part, were making them thoroughly familiar with all the details of Christ's life. There was much more than this, however, for connected with many of the Passion Plays were cycles of tableaux or presentations of special scenes in which, beginning with the Creation, the whole story of the Bible, and particularly those portions which are related to the coming of Christ, were set clearly before them. No better way of impressing upon the people the great truths of Christianity or the life of Christ as the central fact of the world's history could possibly have been imagined. The people were not encouraged to read difficult passages, which even the profoundest theologians find it hard to understand, to take their own meaning out of them and to argue about them, convicting everyone of heresy who did not agree with their interpretations of them, but they were taught the deep moral and religious significance of all the Old and New Testament. They learned the value of the Scriptures as literature as well as their quality as the underlying document of religion, but above all they were taught their relation to life. All this was so put before them that it came as an amusement and not a task, and from their earliest years they became familiar with the great thoughts underlying religion so as to secure its influence over them.

It was towards the end of Columbus' Century that the "Marriage of Witte and Science," which was not published until 1570, was written. This was marked off into five acts and the scenes designated, being the first play in which such an arrangement had been made. The modern dramatic mould was thus created. It is easy to understand that on the deep foundations, literary and technical, thus laid in the century before 1550, the great structure of the Elizabethan drama could be built up.

How much the appreciation for the morality plays has risen may be judged very well from some recent expressions with regard to them by students of the drama. Everyone is particularly loud in praise of "Everyman." In the introduction to "Everyman with other Interludes" in the Everyman series, the writer says that "to turn from Bayle's play (one of the later moralities, 'God's Promises') to the heart-breaking realities of 'Everyman' is like turning from a volume of law to the edifying sermons of one of the gospels." He adds:

"It was written, no doubt, like most of the plays in this volume, by a churchman; and he must have been a man of profound imagination and of the tenderest human soul conceivable. His ecclesiastical habit becomes clear enough before the end of the play, where he bids every man go and confess his sins. Like many of the more poignant scenes and passages in the miracle plays that follow it, this morality too leaves one exclaiming on how good a thing was the plain English of the fourteenth and fifteenth centuries."

It would be a mistake to think that only the serious side of life was portrayed in these old dramas. Quite the contrary, they were full of humor, and the writer of the Introduction to Everyman, already quoted, says in this regard: "In these religious and moral interludes, the dramatic colouring, however crude, is real and sincere. The humours of a broad folk-comedy break through the Scriptural web continually in the guild plays like those in which Noah the ship-builder, or the proverbial three shepherds, appear in the pageant. Noah's unwilling wife in the 'Chester Deluge,' and Mak's canny wife in the Wakefield's shepherd's play, where the sheep-stealing scenes reveal a born Yorkshire humorist, offer a pair of gossips not easy to match for rude comedy. Mak's wife, like the shepherd's in the same pastoral, utters proverbs with every other breath: 'A woman's avyse helpys at the last!' 'So long goys the pott to the water, at last comys it home broken!'

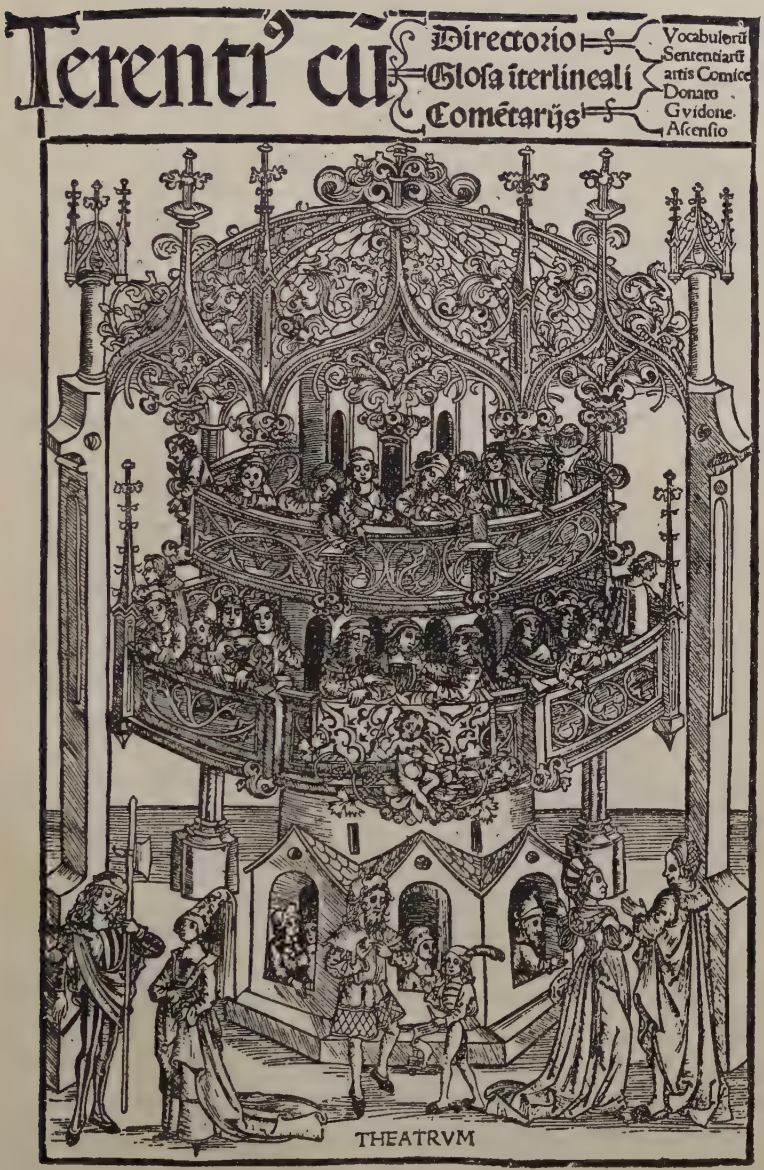
"'Now in hot, now in cold,
Full woeful is the household
That wants a woman!'

And her play upon the old north-country asseveration, 'I'll eat my bairn,'

"'If ever I you beguiled,
That I eat this child
That lies in this cradle,'

(the child being the stolen sheep), must have caused townsfolk and countryfolk outrageous laughter. Mak's wife is indeed as memorable in her way as the Wife of Bath, Dame Quickly, or Mrs. Gamp."

Some idea of the extent to which the men of this time went in attempting spectacles on a large scale may be appreciated from "Mary Magdalen," which combines elements of all the various kinds of religious plays of the time. It was a miracle play because it treats of the life and death of St. Mary Magdalen. It is a mystery play inasmuch as it introduces scenes from the Life of Christ. It is a morality play because ab-



Terentiꝰ cũ
Directorio — Vocabulorũ
Gloſa ĩterlineali — Sententiarũ
Cométarijs — artis Comice
Donato
Guidone
Aſcenſio

PICTURE OF THEATRE ON TITLE PAGE OF COMEDIES OF TERENCE, STRASBURG (1490) stract personages are introduced upon the stage in the presentation of the struggle between good and evil in human life. Dr. Furnivall has divided the play into two parts, with fifty-one scenes altogether, twenty in the first and thirty-one in the second part. There is some evidence that some of the scenes were inserted only to give time for a shift of scenes. Probably they had two pageants or movable trucks which would remind one somewhat of the movable stage that was attempted in the last generation. The burning of the temple and some of the incidents of the wanderings at sea may very well have provided opportunity for spectacular effects of ambitious character. We have no record of how far they went in this regard, though some hints of attempts in the direction of surprising scenic introductions are to be found in contemporary documents, and we know that in Italy they staged an earthquake very effectively.

The play of "The Four Elements" was written just at the beginning of the sixteenth century. The date of its writing is designated by one of the speeches of Experience in this play, who says:

> "Till now, within this twenty years,
> Westward be found new lands,
> That we never heard tell of before this
> By writing nor other means."

The passage illustrates the tendency to make these plays instructive as well as entertaining, and many similar passages might be quoted to show that a definite effort was made to convey information by means of them, though, as a rule, this had much more reference to religion and to social life than to things more distant from every-day living.

One of the important dramatic writers of the first half of our Columbus' Century was John Skelton, born about 1460, and who was one of the most prominent of literary men of England of his time. He had a series of literary quarrels with many of the prominent writers, Alexander Barclay and William Lily, the grammarian, among others, and for a time he enjoyed the patronage of Wolsey, but apparently could not restrain his tendency to satire and so fell into the Cardinal's bad graces. Alexander Dyce edited his works in two volumes in 1843 and called particular attention to the genuine worth of his four dramatic compositions, the "Interlude of Virtue," the comedy called "Achidemoios," the "Nigramansir" (necromancer) and "Magnyfycence." Only one of these, the last, now remains, though there are traditions with regard to the others, and the single one left shows what precious material was lost.

An even more important contributor to this mode of dramatic literature and very significant predecessor of Shakespeare was John Heywood, a friend and neighbor of Sir Thomas More in Hertfordshire, who wrote a series of dramatic works, consisting of five interludes. Of these the "Four P's" is the best known and is the typical example of this form of dramatic literature. Its full title is "A Very Mery Enterlude of A Palmer, A Pardoner, A Pothecary and A Pedlar," and the story turns on the contest arranged between them, and especially the first three, as to which could tell the greatest lie. Palmers were real or supposed returned pilgrims from the Holy Land, bearing palms as a symbol of their pilgrimage, and were noted as a rule for their ability to tell strong stories. Pardoners were wandering merchants who sold printed prayers and various objects of devotion to which indulgences, pardons, in the language of the day were attached. They too were noted for drawing the long bow. The Pothecary and the Pedlar, because of their familiar gossip with the people, knew all the news of the neighborhood in which they lived, and had the reputation of being able to add to the vividness and sensational qualities of stories so that the Four P's might very well be expected to give some fine illustrations of the ability to lie.

The Palmer takes the prize in the contest with the very first story. All are agreed at once that no one can even hope to surpass it. The passage in which he does so is worth while quoting because it gives an illustration at once of the language and style as well as of the kind of humor to be found in Heywood's interludes:

"And this I would ye should understand,
I have seen women five hundred thousand;
And oft with them have long time tarried,
Yet in all places where I have been,
Of all the women that I have seen,
I never saw or knew in my conscience
Any one woman out of patience."

Thus, quietly, and with this force of earnest asseveration, does the largest and most palpable lie leap out of the Palmer's lips. The contestants themselves are at once unanimous in their decision.

Pothecary: "By the mass, there is a great lie!"

Pardoner: "I never heard a greater, by our Lady!"

Pedlar: "A greater! Nay, know ye any so great?"

In his account of the Pardoner, Heywood does not hesitate to satirize many of the pretensions of this class and especially their catering to the superstition of the ignorant by the sale of impossible relics of all kinds. Catholics realize very well that such frauds are practised at all times. Even in our day men go around selling prayers, the recital of which is supposed to give thousands of years of indulgence and other like absurdities. Besides, the trade in manufactured relics is well known, and the ecclesiastical authorities have tried to regulate it at all times. Heywood has his Pardoner offer for sale such relics as a bit of the thumb nail of the Holy Trinity and a feather from the wing of the Holy Ghost and like impossible absurdities. Impositions in the name of religion are still with us. It is interesting to know that before the religious revolution they were fought with that best of weapons, satire.

Before the end of Columbus' Century the first English comedy in the modern sense had been written. It was by Nicholas Udall and was called, from its hero, "Ralph Royster Doyster." He was a swaggering simpleton, a conceited fop of the time who is played upon by one Matthew Merrygreek, a needy humorist who represents the parasite of the old Latin drama under the influence of which this first English comedy was written. For Nicholas Udall was the Headmaster of Eton School, and the play in lively rhyming couplets, interspersed with merry songs, was written to be played by the Eton boys according to their custom of having several plays each year. The play partakes somewhat of the nature of farce and contains a number of situations of the kind that have always drawn a laugh and will doubtless always continue to do so. In one of the scenes in the play, Ralph and his man are beaten in a brisk battle by the women of the play armed with broomsticks. A lesson in the need for punctuation is introduced, showing how completely the sense of writing can be reversed by putting the stops in the wrong places. Udall wrote some other plays, notably one called "Ezekias," used for the entertainment of Queen Elizabeth on her visit to Cambridge.

The other form of literature besides the drama which came to ripe fruition at this time in England is also of a popular character. It consists of the stirring English ballads which were gathered into a volume by Bishop Percy in his "Reliques" at the end of the eighteenth century. There probably has never been more stirring martial singing than is to be found in the "Ancient Ballad of Chevy Chase" or "Adam Bell" or "Clym of the Clough." It has been well said that "in graphic terseness, in poetic simplicity, in fiery fervor, in tenderness of pathos, our modern poetry does not approach these old ballads." Sir Philip Sidney said of "Chevy Chase," "I never heard the old song of Percy and Douglas that I found not my heart more moved than with a trumpet." While the language is simple, the verse rude, the thoughts rugged and the story over-full of sympathy for the outlaw, at all times, even the most refined, these ballads have stirred English hearts. The writers of them are unknown, but they had the genius of true poets, the power of vision and striking ability of expression. The ballads will live as long as our English tongue and will continue to be read even by the cultured, distant in every way from the rudeness of the time in which and the men for whom these ballads were written.

After the Ballad Poetry of this period came quite naturally Sir Thomas Malory's "*Morte d'Arthur.*" There have been many and varying expressions of opinion with regard to the merit of this work, and it is at best a medley from many sources. What Mr. Andrew Lang has called its "splendid patchwork" is harmonized and solemnized by the dignified conclusion "in tenderness and inexpiable sorrow." In spite of its many sources there is a unity of spirit and feeling, and Malory was an admirable narrator. Malory's vitality is attested by edition after edition in the nineteenth century. The book has an appeal to human nature that is eternal and that will always give it a distinguished place among the books of the educated at least. Of style in the literary sense of that term there is very little, and Malory's anomalous constructions have always puzzled grammarians, but as Garnett says in his English Literature,* "These do not render him obscure for the readers of any period." Caxton laid English literature under an immense obligation by insuring the preservation of the work, through his selection of it to be one of his early-printed books. It has done credit to his taste in popular literature ever since.

In the latter part of the fifteenth and the first years of the sixteenth century a wonderful development of English poetry took place in Scotland. Just before Columbus' Century opened, James First of Scotland, who had been detained in an English prison for nineteen years, began the literature of Scotland in glorious fashion. The loneliness of these years prompted him to seek and gain that literary culture which has made his name famous in the world of letters. It is possible that the "King's Quair" (a quire or book), which is a poetical record of his sight of Jane Beaufort, granddaughter of John of Gaunt, from his prison window, and his winning her as his queen, may not be from his hand. There is no doubt at all, however, of his taste in literature, his patronage of it and of his establishment of the tradition which has made the English literature of Scotland so important during most of the centuries since. Four poets of the middle of Columbus' Century in Scotland deserve to be named, Blind Harry, Robert Henryson, Gawin Douglas and William Dunbar. All of them are still read affectionately by Scotchmen, but there are very few among the educated people of the English-speaking countries who would care to confess ignorance of them, and to many they are favorite poets. Dunbar is the greatest of poets in English from Chaucer to Shakespeare, and Scottish critics at least have been loud in its praise. Mr. Craik says:

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* "English Literature: an Illustrated Record in Four Vols." Garnett and Gosse: New York, 1903.

"This admirable master, alike of serious and of comic song, may justly be styled the Chaucer of Scotland, whether we look to the wide range of his genius, or to his eminence in every style over all the poets of his country who preceded and all who for ages came after him. Burns is certainly the only name among the Scottish poets that can yet be placed on the same line with that of Dunbar; and even the inspired ploughman, though the equal of Dunbar in comic power and his superior in depth of passion, is not to be compared with the older poet either in strength or in general fertility of imagination."

The two English poets of our period are Henry Howard, Earl of Surrey, and Sir Thomas Wyatt, who, in spite of inequality in merit, possess so much in common that their names are closely associated. How well they were appreciated in Elizabeth's time and how much their influence meant for Shakespeare's contemporaries may be judged from Puttenham's expression, who said in 1589:

"Henry, Earl of Surrey, and Sir Thomas Wyatt, between whom I finde very little difference, I repute them for the two chief lanternes of light to all others that have since employed their pennes upon English Poesie; their conceits were loftie, their stiles stately, their conveyance cleanly, their termes proper, their metres sweete and well proportioned."

To Surrey, English literature owes two important literary innovations—the introduction of the sonnet and the use of polished blank verse. The influence of Italy and of the classic authors can be seen very clearly, and his version of the second and fourth books of the Æneid, in what Milton called "English heroic verse without rhyme," was a fundamental influence in English poetry. His sonnets are mainly the amatory effusions which were becoming fashionable everywhere at this time and which Shakespeare indulged in in his turn a little later. Some of his biographers and editors have woven a series of fanciful theories over his relations to the "fair Ger-aldine," in whose honor many of the best sonnets were written, but it is doubtful whether these love poems are anything more than the wandering poetic fancies of the time. Surrey's unmerited death on the scaffold at the early age of thirty has deepened the romantic interest that attaches to his name as a poet. Sir Thomas Wyatt, though more than a dozen years older than his friend Surrey, must be considered his disciple in poetry. He, too, wrote some of the new sonnets on the theme that occupied so many of the poets of the time—Love—but, as in the case of Surrey also, we have from him some satires and metrical versions of the psalms.

Probably the greatest contribution to the English prose of the time is Sir Thomas More's "Life of Edward V." Mr. Hallam pronounced it "the first example of good English—pure and perspicuous, well chosen, without vulgarisms or pedantry." Many others have declared More the first great master of English prose and even the father of English prose. There have been dissentient voices among the critics from these high praises. There is no doubt, however, that More wrote a direct straightforward English that deeply influenced the course of English speech, and tradition has given him a high place among the great English orators. The language undoubtedly received a deep impress from him, and though his most important work in literature is "Utopia," written in Latin, his high place in English cannot be denied.

Authorities on English have always recognized this, but owing to religious feelings, and the anti-Catholic tradition created during Elizabeth and James' time, More's work has been neglected, except by the deeper scholars. Samuel Johnson, in the "History of the English Language," prefixed to his dictionary, devotes nearly one-third of all the space that he takes for his purpose to More. He apologizes somewhat for his copiousness of quotation from the chancellor, but justifies it by saying that, "It is necessary to give a larger specimen both because the language was to a great degree formed and settled and because it appears from Ben Jonson that his works were considered as models of pure and elegant style."

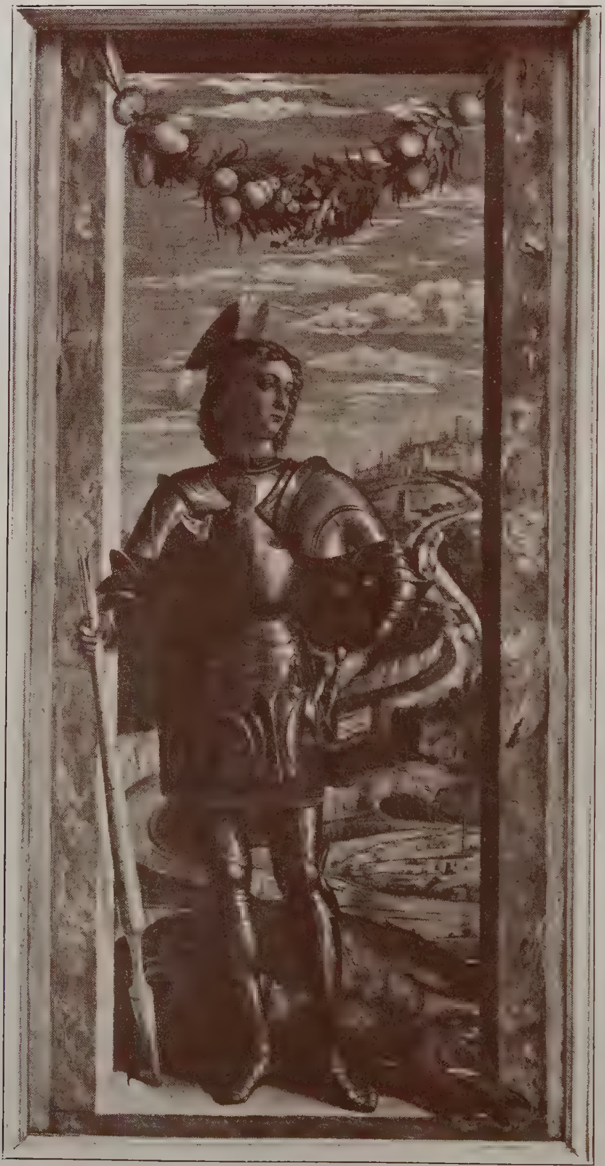
A recent writer,* Prof. J. S. Phillimore, says of More's style:

* *Dublin Review,* July, 1913.

"His usual prose has the easy elastic abundance of Boccaccio and a lawyer's love of proving a point exhaustively in controversy. But he has all the qualities of a great prose style: sonorous eloquence, less cumbersome than Milton; simplicity and lucidity of argument, with unfailing sense of the rhythms and harmonies of English sound. He is a master of Dialogue, the favorite vehicle of that age; neither too curiously dramatic in the ethopoia of the persons, nor yet allowing the form to become a hollow convention, the objector in his great Dialogue (the Quod he and Quod I) is anything but a man of straw. We can see that if Lucian was his early love he had not neglected Plato either. Elizabethan prose is tawdry and mannered compared with his: at his death Chaucer's thread is dropped, which none picked up till Clarendon and Dryden. With his colloquial, well-bred, unaffected ease, he is the ancestor of Swift. His style—so Erasmus tells us—was gained by long and careful studies and exercises; he took a discipline in Latin, of which the fruits were to appear in English, when the increasing gravity of the times warned him that it would be well to speak to a larger public than Latin could reach. Even where he is prolix—and that may seem prolix in black-letter folio which reads easy and pleasant enough in modern form—his merry humor is not long silent."

As in French, some of the translations into English at this period are almost as admirable prose as Amyot's "Plutarch." Even when the translations of the time have the quaintness of the English of that period, they are admirable in their closeness to the original and in a certain rhythm of their sentences. Of Berner's translation of Froissart's "Chronicles," Snell in "The Age of Transition" ("Handbooks of English Literature," Scribners) says: "The English is so thoroughly idiomatic that in reading it one loses all sensation of the book being merely an interpretation, and resigns one's self to its easy and familiar flow with the same joyful complacency as if it were an original work. On the other hand, if one insists on breaking the spell and comparing it with the French text, one is struck not only with the felicity, but also the fidelity of the rendering."

The literary quality of the prose of the first half of the sixteenth century in England is best revealed in the translations of the Scriptures done into the vernacular at this time and in the unequalled Collects of the English Prayerbook. Tyndale and Coverdale are responsible for the translations of the Scriptures, and to Cranmer is usually attributed the writing of the Collects, though, as has been said by Saintsbury, "this attribution derives but very faint corroboration from the Archbishop's known work." It was with these models of marvellously expressive, thoroughly idiomatic English, exquisite examples of style, that the translators of the King James version of the Bible were placed in a position to give us the wonderful fundamental literary work that was to come from their hand half a century later. It has been said that one argument of the most irresistible kind for the divine authorship of the Scriptures lies in the faculty which they have of making all the translations of them great literature. It was their influence that is felt in the English Prayerbook and in those parts of the Breviary which we owe to the first half of the sixteenth century.



MANTEGNA, ST. GEORGE

CHAPTER VI

SCHOLARSHIP IN ITALY

One of the most important chapters in the great accomplishment of the men of this century is its scholarship—that is, the critical and appreciative knowledge of what men had written before their time and especially of the great classical works of antiquity. In this, almost needless to say, Italy is not only a pioneer, but was the *alma mater studiorum*—of whom Linacre was so proud—for those desirous of knowledge of the classics and true scholarship from all over the world. From every country, France, Spain, Germany, distant Poland and Denmark, as well as England, those looking for opportunities for study that could not be obtained at home flocked to Italy. Besides, Italian teachers are to be found teaching everywhere, though Italy herself proved no stepmother to those who came to be nurtured in good learning at her great institutions. Many a foreigner who had proved his ability was given a professorship and spent many years in teaching others in Italy as he had been taught himself.

This is the age of printing, and it was of first importance that good editions of the classics should be printed as soon as possible in order to prevent any further degeneration of their texts and avoid all further risk of losing the precious treasures of antiquity. Scholars in Italy took up the making of good texts, and within a century after the invention of printing, all the important Greek and Latin authors had been published in scholarly editions, the texts of which still command respect. The amount of labor required for this, the judicious scholarship demanded, the patience that was needed and the unselfish devotion to a most trying task, only scholars can properly appreciate. No debt that we owe to the Renaissance is greater than this, what it accomplished for classical literature, and by far the greater part of this debt is owed to Italy.

Everywhere, that is, in every important city, there was a school of the New Learning, and usually some munificent patrons of what they came to call Humanism because it represented humanity's highest interests, supporting scholars who were writing and correcting manuscripts and afterwards forming libraries of the printed books and making it possible for the great printers to continue their work by subscribing for their first editions. Only that the Church was deeply interested in this new movement, it would have been quite impossible for it to have continued. Unfortunately, as always happens whenever men get new knowledge, many of them, that is, the restless and the smaller minds among them, who are always likely to be in a great majority in any new movement, were taken with the idea that they knew so much more than those who went before them that they could not be expected to accept old-fashioned ideas in religion and philosophy. Because of the disturbances produced by such restless characters, there sometimes seems at this time to be opposition between the Church and the New Learning. This false impression is partly due to the fact that in certain countries, notably Germany and England, the reform doctrines were, as pointed out by Gasquet, often called the New Learning, to which, of course, there was opposition. Most of the great classic scholars, however, were ecclesiastics, some of them of very high rank and influence in the councils of the Church, even Cardinals and Popes, and in general the vast majority of the prominent scholars were in the closest of sympathy with the ecclesiastical authorities. The exceptions are so few as to make the existence of this rule very clear, though so much of emphasis has been placed on the exceptions in the modern time that an entirely false impression with regard to Church opposition to education has been produced in a great many minds.

The first name that deserves to be mentioned among the scholars of Italy is Æneas Sylvius of the family of Piccolomini, who is better known under the name of Pius II, which he bore as Pope. He is a typical example of the scholars of the Renaissance, in so far as that, as a younger man, his studies of classical antiquity led him to the expression of pagan ideas in life as well as in language. At the age of forty he reformed and became as well known for his devotion as for his previous looseness of character. He was created Imperial Poet by the Emperor Frederick III, and his reputation for scholarship created a fashion in this regard that did great good for the rising movement of the New Learning. His influence as Pope continued this, though he made it the main business of his pontificate to organize Europe against the Turks so as to prevent the further increase of their power with all that would mean for the destruction of culture as well as religion. Indeed, his love for letters seems to have been at least as great an incentive for the organization of the crusade as his duty as an ecclesiastic. When he heard of the Fall of Constantinople, he exclaimed, "How many names of mighty men will perish! It is a second death to Homer and to Plato. The fount of the muses is dried up forevermore." How much he was thought of by his contemporaries and how much the example of his scholarship meant will be best appreciated from the Piccolomini Palace and other buildings of Pienza, but particularly the exquisitely beautiful Piccolomini Library at Siena. Pinturicchio's decorations for this library are only added testimony to the admiration of his generation. Sylvius' letter to Ladislas, the young king of Bohemia and Hungary who had sought his advice with regard to education, is one of the important documents in the history of education. It contains the oft-quoted passage with regard to the place of memory in education:

"We must first insist upon the overwhelming importance of Memory, which is in truth the first condition of capacity for letters. A boy should learn without effort, retain with accuracy, and reproduce easily. Rightly is memory called 'the nursing mother of learning.' It needs cultivation, however, whether a boy be gifted with retentiveness or not. Therefore, let some passage from poet or moralist be committed to memory every day."

One of the greatest scholars of the period and one of the leaders in the Renaissance movement towards the classics which brought about the reawakening of artistic and literary men at this time was Cardinal Bessarion, whose long life of over eighty years gave him nearly a quarter of a century in

Columbus' period. He came with the Emperor John Palæologus to the Council of Ferrara in 1438, where his reputation for scholarship and vast erudition in all theological matters gave him great authority among the Greek Bishops. To him more than any other must be attributed the formal reunion with the Latin Church, which was the happy issue of that Council. To him, therefore, was committed the honor of reading the Greek formula of the Act of Union. Unfortunately, the union was but short-lived, but Bessarion changed to the Latin rite and in 1439 was created Cardinal.

The Cardinal was high in favor with succeeding Popes and just at the beginning of Columbus' Century was sent as papal legate to Bologna, as "an angel of peace," in the hope that he would be able to quell the factional disturbances and pacify the divided interests. Cardinal Bessarion succeeded admirably in this difficult mission, calmed the internal dissensions and succeeded in introducing wise reforms into the city government and the administration of justice. His principal attention, however, was given to the University. He rebuilt the building and gathered there some of the most famous teachers of the world, encouraging particularly the study of the classics, and above all of Greek. He himself supplied out of his personal revenues whatever was lacking in the salaries, and he gathered around him a notable band of scholars, writers and poets, and began that magnificent outburst of interest in the intellectual life which was to make Bologna so famous.

He continued to be active in his influence on the scholarship of Italy until well beyond eighty years of age, yet was always a factor in the practical life of his time. When he was eighty-one he wrote for Pope Paul II a letter on the organization of a new crusade against the Turks. When he was eighty-three he went on an embassy to Paris in order to bring about the union of the Western nations for a crusade. While at Rome during his later years, Bessarion gathered round him the scholars and writers in all departments. The scientists of the time particularly owe much to his patronage. He was a friend of Peurbach of Vienna, of Cardinal Nicholas of Cusa, of Regiomontanus and many others. In his house the first *Accademia* was founded, and he was known as the patron of letters. He gathered an immense number of valuable manuscripts at very great expense, had copies of others made and gave his treasures at his death to found a library in Venice, his collection forming the nucleus of the famous library of St. Mark.

After these two great Churchmen and patrons of learning and education, there are a series of scholars whose names deserve to be mentioned for the influence which they exerted on the learning of Europe at this time. At the beginning of our century came the Greeks, who were driven out of their native country by the conquest of the Turks. Demetrius Chalcondyles, Theodore Gaza, George Trebizond and Joannes Argyropulos, unable to pursue their studies in peace in the midst of the alarms produced by the Turks, reached Italy before the Fall of Constantinople. Gaza was lecturing on Demosthenes at Ferrara in 1448, where among his pupils was the subsequently distinguished German scholar Rudolph Agricola. The first year of our century Gaza was invited to Rome by Pope Nicholas V to fill the chair of philosophy and take a principal part in the plan which the Pope had conceived for the translation of the principal Greek classics. Gaza's translations were mainly concerned with scientific Greek works, Aristotle " On Mechanical Problems " and " On Animals " and Theophrastus' " Botany." For a time he withdrew to a monastery, but was recalled to Rome by Pope Paul II to take part in the *editio princeps* of Gellius. After the death of Bessarion he retired once more to his monastery, where he died in 1475. His Greek grammar became famous and was used as a text-book by Budæus in Paris and by Erasmus in Cambridge. He is described by Manutius as easily chief among the Latin and Greek scholars of his age, an age replete with scholarship be it said, and he is eulogized by Scaliger over a century later as *magnus vir et doctus,* a great man and a learned.

George Trebizond, after teaching for many years in Venice, was invited to Rome, where he became one of the Papal Secretaries. He also took part in the plan for translating the Greek classics, and his translations include the " Rhetoric and Problems of Aristotle " and " The Laws and Charmenides of Plato." Argyropulos taught first at Padua and then for fifteen years under the patronage of the Medici at Florence. He, too, was invited to Rome by the Pope and was highly esteemed there. His part in the great plan of translation concerned mainly the works of Aristotle, whose "Ethics," "Politics," "Economics," "On the Soul" and "On Heaven" were all printed in his versions. He was the master of Politian, and his lectures were attended by Tiptoff, the Earl of Worcester, and by Reuchlin, the great German humanist. It was to Reuchlin that Argyropulos, after having heard him read and translate a passage of Thucydides, exclaimed with a sigh, "Lo! through our exile Greece has flown across the Alps." Chalcondyles, at the early age of twenty-six, made an immediate conquest of his Italian audience at Perugia in 1450. Subsequently he lectured at Padua, being the first teacher of Greek who received a salary at any of the Universities of Europe. For twenty years he lectured in Florence, and there prepared the *editio princeps* of Homer, the first great Greek author to be printed. After the death of Lorenzo de Medici he withdrew to Milan and there edited "Isocrates" and "Suidas." His emendation of Greek texts is the best proof of his scholarship, and few men of his time equalled his power in this. He was noted for the gentleness of his disposition and his integrity of character, and he made many friends. There is a famous picture by Ghirlandajo in Santa Maria Novella at Florence which contains portraits of Ficino, Landino, Politian and Chalcondyles.

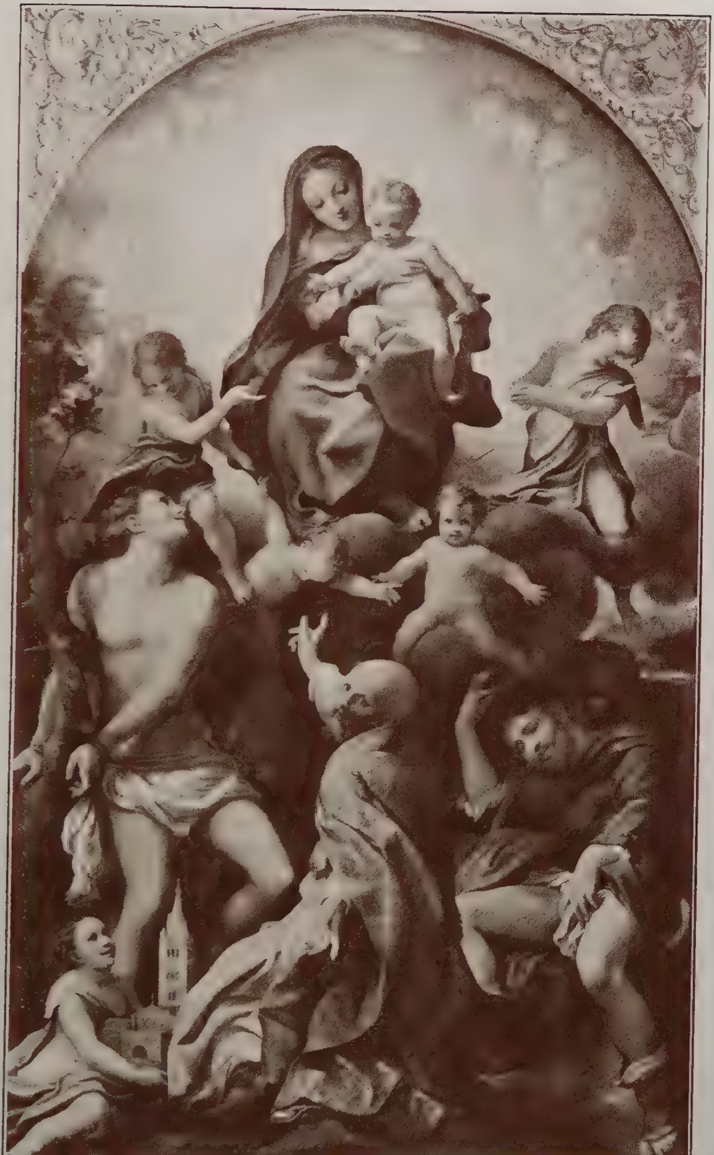
The work of all of these men was greatly assisted by Pope Nicholas V, who was himself distinguished as a scholar in this scholarly time. During his pontificate in the first years of Columbus' Century he did more for the encouragement of learning than anyone else of the time. His wide knowledge of manuscripts made him personally an expert, and he gathered from all lands and is the founder of the Vatican collection of manuscripts. Besides the translations of Aristotle, Thucydides, Herodotus, Xenophon, Polybius and Epictetus, Diodorus Siculus, Strabo and Appian were translated under his direction. The catholicity of his taste, and above all the inclusion of the scientific books of the Greeks, is a tribute to the liberty of spirit of the Pope. On his death-bed he declared that his greatest consolation was that he had been liberal in the rewarding of learned men.

After the Papal influence, the most important factor for the encouragement of scholarship was the academies which were founded at this time. Lorenzo de Medici revived, after an interval of 1200 years, the ancient custom of celebrating the memory of Plato by an annual banquet. Out of this arose the *Accademia* of Florence, nearly every one of the members of which were distinguished scholars. The best known among them are Landino and Ficino, both of whom had been Lorenzo's tutors, Pico della Mirandola and Politian. The first account that we have of the Academy is to be found in the introduction to Ficino's edition of Plato's "Symposium." He tells that his rendering of all the seven speeches in the "Symposium" was read aloud and discussed by five of the guests. Undoubtedly Ficino was the centre of the *Accademia* and one of the greatest scholarly influences of the time. At the age of forty he took Holy Orders and was noted for the next twenty-five years, until his death, as a faithful priest whose scholarship was devoted to showing how Plato illuminated Christianity. In the latter part of his life he lectured on and translated Plotinus.

The best known of these scholars in Florence was undoubtedly Politian, much more interested in Latin than in Greek, though Sandys, in his "History of Classical Scholarship" (Cambridge University Press, 1908), says that he was probably the first teacher in Italy whose mastery of Greek was equal to that of the Greek immigrants. Though he died at the early age of forty, we owe to him valuable textual criticisms of Lucretius, Propertius, Ovid, Statius, Ausonius, Celsus, Quintilian, Festus, and Catullus and Tibullus. His monograph on the chronology of Cicero's letters, his discussion of the use of the aspirate in Latin and Greek and of the differences between the aorist and the imperfect as illustrated by the signatures of Greek sculptors, as well as his power of solving textual difficulties, made him one of the great contributors to the magnificent work accomplished at this time for classical scientific grammar and erudition, as well as for the provision of proper texts of the classics for the world. Besides pure literature, he was interested very much in law and made a special study of the " Pandects " of Justinian. He refused to follow those who slavishly imitated Cicero, and denounces the Ciceronians as the mere apes of Cicero. His expressions in the matter are famous. " To myself the face of a bull or a lion appears far more beautiful than that of an ape, although the ape has a closer resemblance to man. But, someone will say you do not express Cicero. I answer I am not Cicero, what I really express is myself."

Academies were formed in other cities and accomplished excellent results for scholarship, though at times they fell under the suspicion of the authorities of dabbling in politics or of actually favoring political factions or even revolutionary ideas. Nearly always they owe their origin to the patronage of high ecclesiastics or those who were in very close sympathy with the Church and always they contained clergymen of distinction. After that of Florence the next in chronological order was that of Rome. There is even some question whether the Roman Academy was not the first in time, only it did not receive this name until after it had been adopted in Florence. The most important figure in the Roman Academy was the man who, for want of a better, assumed the old Roman name Pomponius Lætus. He was narrow enough of intellect to refuse to learn Greek, because he feared that it would spoil his Latin style. The members of the Roman Academy, under his ruling spirit, celebrated the foundation of Rome on the annual return of the festival of the Palilia, a custom which is still retained by many of the Roman academies. Pomponius did his gardening according to the precepts of Varro and Columella, the Latin writers on agriculture, and nothing pleased him better than to be regarded as a second Cato. It is to him that is due the revival of the regular performances of Plautus' plays.

Among the most important members of the Academy were Platina, who became the Librarian of the Vatican, and Sabellicus, who afterwards became the Prefect of the Library of San Marco in Venice. For a time, owing to suspicion of its political, perhaps also its religious, tendencies, the Roman Academy was suppressed and some of its members put in prison, but under Pope Sixtus IV it was revived and all its



CORREGGIO, BLESSED VIRGIN AND ST. SEBASTIAN

old customs restored. Pomponius wrote commentaries on the whole of Virgil, on Sallust and Curtius, on Pliny's letters and Quintilian and on his agricultural favorites, Varro and Columella, and his equally great favorites, Festus and Nonius Marcellus, the grammarians. In order to complete his similarity with the old Romans, he had expressed the desire at one time in life that after death his body should simply be placed in an ancient Roman tomb on the Appian Way. When he died at the age of seventy he had changed the views of his earlier years and was given a magnificent Christian funeral. So great was the veneration for his scholarship that his obsequies in the Church of *Ara Coeli,* in the midst of the Roman antiquities that he had loved so well, were attended, as Gregorovius tells us, by some forty bishops.

This Roman Academy continued to exist, now flourishing, now occupied with trivialities, as is the way with such institutions, until the sack of Rome in 1527. As Sandys says ("Harvard Lectures on the Revival of Learning," Cambridge University Press, 1905), "Its palmy days were in the age of Leo X, when it included the most brilliant members of the literary society of Rome, men like the future Cardinals, Bembo and Sadoleto, as well as Paolo Giovio and Castiglione. It encouraged very much the study of Latin particularly, and its members wrote Latin poems and delivered Latin orations and above all encouraged the development of Roman Archæology, the preservation of Roman remains of all kinds, the editing of books and the recovery of every possible phase of information with regard to Roman life."

There were minor academies in Rome, one of which, the Vitruvian Academy, occupied itself mainly with architecture. But as was true also at Florence, where there were a number of minor academies, some at least of these were only cloaks for political discussions and organizations, and as a consequence brought other and more serious bodies of the same name under suspicion.

The next academy of importance is that of Naples, which came into existence probably just about the beginning of Columbus' Century during the reign of Alfonso of Aragon, the magnanimous patron of learning. Its most prominent members were Antonio of Palermo, whose Italian name of Beccadelli is often used; Pontano and Sannazzaro, the poets, and Laurentius Valla, the historian and professor of rhetoric. Valla subsequently became professor of rhetoric in Rome at the invitation of Pope Nicholas V, who wanted his assistance for the carrying out of the great plan of translations from Greek to Latin of all the great authors which he constantly cherished. Valla became Papal Secretary under Nicholas' successor, Pope Calixtus III, but unfortunately he died at the early age of fifty. He deserves extended notice because he is one of the founders of historical criticism, and he began that denunciation of exaggerated belief in Aristotle very proper in itself, but which unfortunately went too far and led to under-estimation of the mediæval scholars who had studied Aristotle so sedulously, and even of Aristotle himself. His discussion of the Donation of Constantine attracted much attention and showed very clearly how scholarship might be used to good purpose for the correction of false notions even long after events had happened.

The *Accademia* at Venice deserves more than a passing mention because, though founded much later than the others, it set itself the very practical purpose of bringing about a systematic publication of the Greek classics. It was founded by Aldus in 1500, who called it the New Academy of Hellenists, and was as strongly Grecian as Pomponius' Academy was Roman. Its constitution was written in Greek, Greek was spoken at its meetings and Greek names were adopted by its Italian members. Fortiguerra of Pistoia, the Secretary of the Academy, thus became Carteromachus. The principal aim of the Academy was to produce in each month an edition of at least 1,000 copies of some good author. Among the honorary foreign members were Linacre, some of whose translations Aldus published, and Erasmus, who visited Venice in 1508 and who expressed himself as delighted with the opportunity to take part in the deliberations of the Academy. How successful the Academy was in its purpose of encouraging scholarly printing, all the world knows. Aldus produced no less than 27 *editiones principes* of Greek authors and Greek works of reference. At the time of his death in 1515 all the principal Greek classics had been printed. The Academy had been a large factor in helping him in this magnificent achievement, which meant more for scholarship throughout the whole of Europe than perhaps any other single movement occupying so short a time.

There are many of the scholars of the Renaissance whose names are scarcely known outside of the narrow circle of modern specialists in their departments, though their influence was felt for many generations and their work is worthy of the highest praise. A typical example of these is Ambrogio Calepino, the Augustinian monk, to whom we owe the first great modern Latin dictionary. Under the title of "Cornucopia" it appeared first at Reggio in 1502 and was reprinted many times during the sixteenth century. The Alduses at Venice printed no less than eighteen editions of it. This lexicon came to be the groundwork on which subsequent lexicographers, recognizing its merit, built up their larger works. There was an edition of it in seven languages by Facciolati, printed at Pavia in 1718, which was reprinted many times. The name of Calepinus became a synonym for the word dictionary or lexicon and is frequently used, without capitalization as a common noun, in Italy during the subsequent generations. His magnificent work well deserved this recognition, for it is a monument of the classical scholarship of the first half of Columbus' Century.

One of the greatest of the Italian scholars of the first half of Columbus' Century was that distinguished member of the Florentine Academy whose books were the special favorites of Sir Thomas More, Giovanni Pico della Mirandola, who died at the early age of thirty-one after dreaming the dream of the unity of all knowledge and becoming absorbed in planning a vast work which was to form a complete system of knowledge. He had devoted himself to Greek and to Christian theology and philosophy and even rendered himself liable to suspicion by his delvings into Cabalistic lore and had deeply impressed the generation among whom he lived. His reputation as a marvellous precocious scholar, who died all untimely, still endures, and Sir Thomas More's study and discussion of his works gave him a reputation in England which added greatly to his fame throughout the whole West of Europe. He was happy in his end, for he passed away on the very day in which the invader of Italy, Charles VIII of France, marched into Florence.

Scholarship continued to hold the highest place in Italy until political troubles, and above all the sack of Rome in 1527, drew men's minds from peaceful pursuits, scattered libraries and made patronage of scholarship most difficult for rulers and ecclesiastics.

CHAPTER VII

THE SCHOLARSHIP OF THE TEUTONIC COUNTRIES

Germany and the closely-related Teutonic countries are the only part of Europe which did not create a distinct national literature during this Renaissance period. It is true that Hans Sachs' popular poetry comes from this time, and this has always been popular in Germany and has often been reprinted, but it has never had any influence on world literature and represents an almost solitary phenomenon in the history of German literature. The reformers wrote vigorous German prose, and in the controversial articles which were so frequent at the time, and above all in the translations of the Scriptures into the vernacular, laid the foundation of modern High German which must be traced to this period, but even Germans scarcely claim the existence of a German literature of the Renaissance.

On the other hand, the scholarship of Germany at this time was as remarkable in its own way as Germany has ever been in subjects in which it was interested. Probably nowhere in Europe did scholarship penetrate more deeply among the people, and nowhere were freer opportunities for mastery in the classical languages afforded than along the Rhine, at Nüremberg and the neighboring cities and even in districts to the north of these. The German thought of the time was written in Latin and much of it was merely academic and passing in character. Some of it, however, as à Kempis' works, above all the "Imitation of Christ," were destined to an immortality of enduring influence. Not a little of the educational writings of Erasmus and those particularly of other students of the Brethren of the Common Life were to witness many revivals of interest down to our own day, when they are again attracting wide attention. Scholarship diverted the intellectual energy that would have been devoted to the production of a national literature for the Germans, and must be studied deeply to appreciate the Germany of the time.

For any proper understanding of scholarship outside of Italy during the Renaissance period, which corresponds with Columbus' Century, the most important preliminary is a knowledge of the institution and spirit and the work and pupils of the Brethren of the Common Life. The significance of their history has not been generally recognized, especially in English-speaking countries, until recent years, and even now many fail to appreciate its high import. Prejudice against religious orders, acquired through sympathy with the Reformation, obscured the value of this great factor in the education and scholarship of the Teutonic countries which can indeed scarcely be exaggerated. The order of the Common Life was, especially in the first half of what we have called Columbus' Century, the great foster mother of scholars whose reputations have deservedly lasted till our time and have now become imperishable landmarks in the history of scholarship. The mention of the names of such pupils of theirs as Agricola, Thomas à Kempis, Cardinal Nicholas of Cusa, Alexander Hegius and Wimpheling would be quite enough to afford ample proof of this.

The members of this religious order took no vows, nor did they ask or receive alms. According to their constitution, they worked for their daily bread, though their first aim was to cultivate the life of the spirit, and they were required by their rules to devote themselves in connection with this purpose to their intellectual development, to education, the copying of classics and the writing of books. Their founder, Geert de Groote (1340-1384), belonged to a rather wealthy merchant family, and when he took orders he obtained ecclesiastical preferment as a canon at Utrecht and at Aachen. Somewhat like St. Francis of Assisi, in the midst of what might well seem a conventionally successful life, he fell ill and had the experience that Dean Stanley described when he said "things look different when viewed from the horizontal position." On his recovery, Geert de Groote resigned his canonries, gave his goods to the Carthusians and spent seven years in solitude, thinking over the significance of life and what was man's true purpose in it. At the end of that time he came out to preach, and his preaching met with wonderful success. Thousands flocked to listen to him, and soon many young men wished to join with him in his simple mode of life, to be directed by him and to help him in his work.

Almost without his wishing it, a religious community grew up around him, and when Geert de Groote died, near the end of the fourteenth century, his successor, Florence Radewyns, founded the famous monastery of Windesheim, the mother-house of the new religious life. These new religious taught especially the middle and lower classes, copied books and themselves wrote commentaries in language as simple as possible on all manner of spiritual subjects. Their schools became centres of the spiritual and intellectual life of the Low Countries and the Rhineland, and during the course of the fifteenth century they grew in numbers and in the attendance of scholars. Deventer, one of their most famous schools, counted over 2,000 students about the time of the discovery of America, and some of the greatest men of this first part of Columbus' Century had been students of the Brethren of the Common Life.

Mr. Hamilton Mabie, in his collection of essays, "My Study Fire," has paid a worthy tribute to these dear old scholars and teachers which sums up succinctly and sympathetically their work and its significance. He said (page 92):

"I confess that I can never read quite unmoved the story of the Brethren of the Common Life, those humble-minded, patient teachers and thinkers whose devotion and fire of soul for a century and a half made the choice treasures of Italian palaces and convents and universities a common possession along the low-lying shores of the Netherlands. The asceticism of this noble brotherhood was no morbid and divisive fanaticism; it was a denial of themselves that they might have the more to give. The visions which touched at times the bare walls of their cells with supernal beauty only made them the more eager to share their heaven of privilege with the sorely-burdened world without. Surely Virgil and Horace and the other masters of classic form were never more honored than when these noble-minded lovers of learning and of their kind made their sounding lines familiar in peasant homes."

Many people seem inclined to think that the education of the poor became possible only in our time. The guild schools of the Middle Ages are a contradiction of this, but the story of the Brethren of the Common Life shows how much organized effort was given to the educational care for poor students. In his "Life of Thomas à Kempis," Kettelwell has told what they did for the poor and also how broad and wide were the foundations of the education that they laid (p. 165):

"But there was another safeguard which was of great service in preserving them (the Brethren) from being led away by fanaticism or wild enthusiasm, because it gave them a useful object and purpose in life to look after, and that was the encouragement they gave to intellectual pursuits and the interest they took in education. Much of the instruction given in schools at that time was often only within the reach of those who could pay for it, whilst there was no little defect in imparting it. . . . The Brothers of the Common Life, on the contrary, not only promoted the giving of instruction gratuitously, or assisted those unable to pay for it, and thus brought the arts of reading and writing within the reach of many that could not otherwise attain them; but, what was of more consequence, they infused into education quite a new life, and imparted to it a purer and nobler aim.

"It is well known to the student of history that a great improvement in the character of education took place about this time, and that the advance of learning in the Northern parts of Germany is greatly indebted to the efforts of the Brothers of the Common Life. Though Gerard charged the members of the Brotherhood to look to Christ as the source of all light and truth, all life and peace, and without Whom all learning or gifts were but as vain shadows, yet he would not confine them to none but Christian authors. Among the ancient philosophers he would have his educated disciples to read the works of Plato and Aristotle, and valued the former for his excellent discourses in the person of Socrates. The morals of Seneca pleased him much, and he recommended them to the Brothers as a rich mine of wisdom. He himself was versed in the art of medicine and knew something of law, and it is evident that some of his disciples were much esteemed for their knowledge of them. And from what Thomas à Kempis says of Gerard, he would have the clerics to study geometry, arithmetic, logic, grammar and other subjects. From which it will be perceived that the Brothers of the Common Life were urged to the pursuit of what at that time was a liberal and enlightened education, and consequently were the first in their generation, and in those parts, to promote and encourage it, and were thereby the less likely to be led away or inflated by an ignorant or foolish enthusiasm."

They did copying, but under instructions made their copying of value for their own education. This was an important development (p. 167):

"It had begun, as we have shown, in great simplicity under the blessing of God. To the young clerics he (their founder) had joined certain priests and laymen, thus making a mixed society. Idleness and accumulation of worldly goods had been the rock on which so many of the Monastic Orders had made shipwreck, and therefore, to the cultivation of the Interior life had been joined some useful employment and the pursuit of fine letters. And that the mind should not become enervated by the work of copying manuscripts being too long carried on as a mere manual operation, Gerard had prescribed to each of the clerics that he should make extracts of the finest sayings he met with, especially of the Fathers and of the Saints, and even make minutes of his own reflections, and inscribe them in a certain book called 'Rapiarium.' And, as the enthusiastic deacon of Deventer always joined example with precept, he himself transcribed and published many little works composed from the works of the Saints, most of which are now lost. It is doubtless from this custom, which Thomas à Kempis largely carried out in the early days of his connection with the Brotherhood, that we are mainly indebted for those many little devotional works which he afterwards wrote, at the head of which he places the books of the '*De Imitatione Christi.*'"

It would be easy to think that probably these good religious devoted themselves much more to the cultivation of piety than of good literature, and that perhaps even their devotion to culture was rather superficial. As a matter of fact, however, their schools became famous for their thoroughness, and all along the Rhine the sons of "the butcher and the baker and the candlestick-maker" learned to read and write Latin fluently, corresponded in Latin letters and above all seem to have received very precious inspirations for the intellectual life that were not extinguished even by a merely money-making career. A good many of the graduates of their schools became famous in the German scholarship of this period. Not all of them became clergymen, though of course a great many did.

Probably the most important of their students was Cardinal Nicholas of Cusa, the greatest and most original thinker of the fifteenth century. Strange as it may seem, his achievements in the intellectual life were nearly all made in mathematics and in science. His work is sketched in the chapter on Physical Science of the Century. Because of an important contribution to medicine, he has a chapter in my "Old-Time Makers of Medicine" (Fordham University Press, N. Y., 1911).

The thoroughly practical character of Cusanus' mind and its education from books and experience can be readily appreciated from a paragraph of his with regard to the unification of his Fatherland, in which his far-seeing patriotism anticipated the most modern views.

Cusanus was sent out as Papal Legate to Germany, just about the beginning of Columbus' Century, in order to correct abuses and bring Christendom into closer touch with the Holy See. During the course of his journeys in Germany he recognized all the weakness and the evils connected with the splitting up of the German people into many petty principalities. He saw clearly how much their union under one head would mean for the people themselves, their happiness and progress, and above all for the peace of mankind. Nearly four centuries before the actual accomplishment of the dream of the German Empire, he expressed himself very emphatically on this point, and curiously enough drew his main arguments from economic conditions and the failure of any assurance of lasting peace afforded by the existence of many petty governments.

CIMA DA CONEGLIANO, INCREDULITY OF ST. THOMAS (VENICE)

It is characteristic of his very practical scientific bent of mind that he should have entered so far into the details of the accomplishment of his vision as to suggest the making of a budget and the giving of formal accounts of how the money was spent to the legislative body.

"The law and the kingdom should be placed under the protection of a single ruler or authority. The small separate governments of princes and counts consume a disproportionately large amount of revenue without furnishing any real security. For this reason we must have a single government, and for its support we must have a definite amount of the income from taxes and revenues yearly set aside by a representative parliament and before this parliament (*Reichstag*) must be given every year a definite account of the money that was spent during the preceding year."

Some idea of the intellectual aspirations of the time and the attitude of men towards knowledge and truth may be gathered from a paragraph of Cardinal Cusanus, which is so comprehensive and so full of the love of wisdom in the best sense of the word as to be classical and to deserve a place in the notebook of every teacher. It may well be taken as the motto of the schools of the Brethren of the Common Life.

"To know and to think, to see the truth with the eye of the mind, is always a joy. The older a man grows, the greater is the pleasure which it affords him, and the more he devotes himself to the search after truth, the stronger grows his desire of possessing it. As love is the life of the heart, so is the endeavor after knowledge and truth the life of the mind. In the midst of the movements of time, of the daily work of life, of its perplexities and contradictions, we should lift our gaze fearlessly to the clear vault of heaven, and seek ever to obtain a firmer grasp of and a keener insight into the origin of all goodness and beauty, the capacities of our own hearts and minds, the intellectual fruits of mankind throughout the centuries, and the wondrous works of nature around us, at the same time remembering always that in humility alone lies true greatness, and that knowledge and wisdom are alone profitable in so far as our lives are governed by them."

One of the greatest of the students of the Brethren of the

Common Life is the famous Rudolph Agricola, who was educated at Deventer, but, with the intellectual curiosity characteristic of his time and the ardor for study and opportunities for intellectual development which was so often seen in Columbus' Century, wandered on to Erfurt, Louvain, and then Cologne and Paris in order to miss no possible educational opportunity. When he was twenty-five he went down to Italy, where he studied law and rhetoric at Pavia and then to Ferrara, where he studied Greek under Theodore Gaza. He held a political office for some time, but John of Dalberg, Bishop of Worms, recognizing his scholarship, secured for him the opportunity to teach at Heidelberg. He lectured on Aristotle and translated Lucian. Above all he was the great pioneer of humanism in Germany, and by his personal influence lighted a torch that was soon to illuminate the country. He wrote to Rudolph von Langen once when he was seeking a headmaster for the Cathedral School at Münster: "I entertain the highest hope that by your aid we shall one day wrest from proud Italy her vaunted glory of pre-eminence in education and literature."

Jacob Wimpheling, who came later to be known as "the Schoolmaster of Germany," is another one of these students of the Brethren of the Common Life who reached distinction. He was educated at Schlettstadt in what is now Alsace. Like the others, he wandered far afield, however, for his scholarship. He studied at Freiburg and Erfurt and also at Heidelberg and was probably in Italy for a time. He returned to Heidelberg as professor, his lectures being mainly upon St. Jerome. In nearly every city in which he stayed for any length of time he founded literary societies and devoted himself to the reform of educational methods. He insisted above all on the importance of moral training in education, and has made it very clear that he felt that an educated man without high moral training was more dangerous for evil than one without education. His writings obtained a wide circulation and did much to determine the character of education for two centuries. His idea was that education should produce able and conscientious citizens rather than accomplished scholars. He was eminently practical in his way of looking at things and deprecated the notion so common at many times in history that the storing of the memory with information, instead of the training of the mind by thoughtful work so as to make it capable of the best judgment when that is needed, is the true ideal in education.

One of the pupils of Agricola in Greek, though he was an older man, was Alexander Hegius, who, during the last fifteen years of his life, which correspond almost exactly with the last fifteen years of the fifteenth century, made the school of Deventer the great educational centre of North Germany. Among his pupils at Deventer was Erasmus. Hegius did much to put an end to the older mediæval ideas in education, which had become outworn, and to bring in the study of the classics. One of his great friends, Rudolph von Langen, was a student of Erfurt who visited Italy and came back full of enthusiasm for humanistic studies and finally succeeded in founding a school of the New Learning at Münster, where he was the Canon of the Cathedral Church. He tried to secure Hegius as the headmaster of this school, but had to be content with his pupil, Murmellius, who wrote a series of very useful text-books at this time.

The greatest of the pupils of the Brethren of the Common Life, who is also one of the greatest scholars of all time, is Desiderius Erasmus. Probably no better idea can be obtained of the high estimation in which scholarship was held at this time in Europe than from the career of Erasmus. He was welcomed everywhere. He was looked upon as one of the moving forces of the time. His opinions were eagerly sought, his books were read, he had the friendship not only of scholars, but of high ecclesiastics, the nobility and even royalty. He did an immense amount of work and exercised a deep influence over his time. His influence over England was especially deep, and he aided Dean Colet in his great design for the future school of St. Paul's by writing his treatise, "*De ratione Studii*"; he was a friend of Bishop Warham and of Sir Thomas More; through the influence of Bishop Fisher of Rochester he became Lady Margaret Professor of Divinity at Cambridge; in a word, he entered into all the intellectual life of the time everywhere. He was in Italy for years, helped Aldus, the printer, at Venice, drawing inspiration from the libraries, the scholars and the classic remains. His many monographs and dialogues meant much for the diffusion of right views as to classical education. His editions of Latin authors comprise Seneca, Suetonius, certain works of Cicero, Pliny and Terence. His Greek texts include Aristotle and Ptolemy. He made recensions of St. Ambrose and St. Augustine and St. Chrysostom, with three editions of St. Jerome. His edition of the Greek Testament is probably more important than any of these.

One of the important scholars and teachers of Germany at this time, though anyone who reviews his life work with some care will surely be inclined to think that his import has been exaggerated because of his connection with the reform movement, and that in comparison with many other scholars of the time he does not deserve that high pre-eminence of reputation which has been accorded him, was Philip Schwarzerd, who translated his family name of Black-earth into the Greek Melanchthon and is known by that name. He was but one of the many great German scholars at this time, though many people seem to think that he stands almost alone, a striking example of the supposed freedom of intellectual development that was ushered in by the Reformation.

Melanchthon, through the influence of his uncle, Reuchlin, became Professor of Greek at Wittenberg. He had been a lecturer on Virgil, Terence and Cicero. During his teaching he wrote a Greek and Latin grammar and edited many editions of the classics and published a series of commentaries on Cicero, Terence, Sallust, Ovid, Quintilian, as well as selections from Aristotle's "Ethics" and "Politics." He was a gentle, kindly scholar, deeply Christian in his principles, without any sympathy at all with the paganizing spirit of many of the lesser humanists, above all outside of Germany. His gentler spirit was overborne by Luther's strong character. He is said to have told his mother on her death-bed that the old Church was a good one to die in, though the reformed might be well enough to live in. The spread of the Reformation in Germany led to the adoption of his text-books widely, hence his name *preceptor Germaniæ.*

Scholarship was not, however, confined to the Rhineland

and the Western part of Germany. Many of the cities of the Eastern portion had magnificent developments of education and classical scholarship at this time and shared in the art impulse of the period. Nuremberg, Augsburg, Innsbrück, Vienna, as well as Stuttgart, Ingoldstadt and Tübingen, shared in the movement. The great teacher in this part of Germany was Johann Reuchlin, who studied Greek at Paris and at Basel, as well as in Italy, taught at Basel, Orleans and Poitiers and then spent nearly twenty-five years in teaching at Stuttgart, Ingoldstadt and Tübingen, where he was Professor of Greek and of Hebrew. When he was but twenty he produced a Latin dictionary called "*Vocabularius Breviloquus*," noted for its brevity, conciseness and orderly arrangement, which passed through twenty editions in less than thirty years. He became so proficient in Latin, Greek and Hebrew that he was called "the three-tongued wonder of Germany." His Hebrew text-books gave a great impetus to the study of that language and literature in Germany.

He was very highly thought of, was sent on various diplomatic missions to Italy, occupied important judicial positions under the government and wielded an immense influence over the men of his time. He died some five years after the beginning of the Lutheran movement, but had no sympathy with the Wittenberg professor's schismatic attitude. When he found that his nephew Melanchthon, for whom he had secured the chair of Greek at the University of Wittenberg, had attached himself to Luther, he expressed his disapproval and cancelled the bequest of his library, which had previously been destined for Melanchthon. Reuchlin was a representative of the widest culture of the time, a source of inspiration and incentive to scholarship for all who came in contact with him. A bitter controversy over some of his writings occupied the attention of all literary Germany during the early part of the sixteenth century, showing how widespread was interest in all intellectual questions at this time.

The men who led in the defence of Reuchlin in this controversy were mainly Ulrich von Hutten, Johann Jaeger of Dornheim and Conrad Muth, or as he came to be known from his Latin name *Mutianus Rufus*, another of the students of the Brethren of the Common Life, a school-fellow of Erasmus at Deventer. He had subsequently studied in Italy, where he became an intimate of Pico della Mirandola and took the degree of Doctor in Law at Bologna. Sandys has told his story in his "History of Classical Scholarship" (page 257):

"On his return he (Muth) settled at Gotha, where he placed, in golden letters, over the door of his canonical residence, the words BEATA TRANQUILLITAS, and thereafter devoted his thoughts to 'God and the Saints and the study of all Antiquity.' He took the keenest interest in his younger friends, the humanists of Erfurt, inspiring them with an eager desire for the spread of classical literature, a hatred for the pedantry and formalism of the old scholastic methods and a critical spirit which felt little reverence for the past. After organizing the victory of the humanists over the scholastic obscurantists of the day, their leader lived to see his 'tranquil' home ruthlessly plundered by a Protestant mob, at a time when the quiet waters of Humanism had been overwhelmed by the stronger stream of the Reformation."

One of the great German scholars and editors of the Renaissance was Conrad Celtes, whose real name was Conrad Pickel, but was changed with the typical classicizing tendency of the Renaissance to the antique form Celtes. He had received his education under such men as Bishop John of Dalberg and Rudolph Agricola, and then after travelling in Italy, where he was in intimate relations with Pomponius Lætus, Ficino and the famous printer Aldus Manutius, he was, on his return to Germany, crowned poet laureate at Nuremberg and there also received the doctor's degree. During his travels through the Northern countries, he founded, in imitation of the Roman Academy, literary societies in many of the cities. There was the *Societas Literarum Vistuliana,* whose seat was at Cracow; the *Sodalitas Literarum Danubiana,* founded originally in Hungary, but afterwards transferred to Vienna, and the *Sodalitas Literarum Rhenana,* which had members along the Rhine.

This last Academy was founded at Mainz the year before the discovery of America. Three of the most distinguished men of the time were among its members. Johann von Dalberg, the Bishop of Worms, whose name occurs so often in the history of the scholars of the time because of his munificent patronage of learning, was its first president. The Abbot Trithemius of Trittenheim and Wilibald Pirkheimer of Nuremberg were among its prominent members. Trithemius spent much time and money in the collection of old manuscripts. Pirkheimer was eminent as a statesman and a patron of humanism and as a translator of Greek texts and a student of archæology.

Besides founding these academies, Celtes lectured in many universities and issued an edition of the writings of Hroswitha, the nun dramatist of the tenth century. It was such a surprise to his generation (it is scarcely less to ours, so little diffusion of true historical information is there) to find that there had been any literature in the convents along the Rhine in the tenth century, that for some time there was considerable discussion as to whether Celtes had not forged these writings, but it has been definitely settled on absolutely unimpeachable evidence that Celtes only edited manuscripts that he found.

As Librarian of the Imperial Library, founded by Maximilian I of Vienna, Celtes gathered together many Greek and Latin manuscripts and generally exercised his influence to secure precious old documents from destruction by proper care for them. As a poet he attracted no little attention in his own time, though his poetry is not of a high order. He was the head of the Poets' Academy at Vienna, the first institution of its kind in Europe, and his influence as a scholar and a literary man was much more than his originality as a writer. He was an intimate friend of Charity Pirkheimer and many of the Nuremberg group of humanists, and some of the freedom of his poetry might seem to indicate a lack of religion, but these friendships apparently indicate carelessness in religious matters, but not rejection of religion. On a number of occasions Charity Pirkheimer reproved him for the freedom of his poetry.

The careers of the Pirkheimers give a good idea of the interest in scholarship on the part of both men and women in Germany during this Renaissance period. Charity Pirkheimer, afterwards the Abbess of the Convent of the Poor Clares in Nuremberg, deserves mention in this regard as much as her brother, but the sketch of her career properly finds a place among the Women of the Renaissance. Wilibald Pirkheimer deserves the immortality that his scholarship has secured for him. He translated Xenophon, Plato, Plutarch and Lucian into Latin, but the spirit of the time will be better understood when it is recalled that he also made translations of Euclid and Ptolemy. The ordinary assumption that interest in the old pagan authors lessened attachment to the Church is refuted by his translations of the Greek Fathers also into Latin. He was himself the author of a history of Germany which won for him the title of the German Xenophon. His interest in letters, however, was only one portion of his scholarship, for astronomy, mathematics and the natural sciences were not only favorite subjects of study, but fields in which he carried on successful investigation. Besides, he took up the study of numismatics with great assiduity, and helped to bring about a general recognition of its value as a distinct department of historical research.

It was typical of the universality of the æsthetic interests of the men of the times in which he lived that Pirkheimer was also deeply attracted to art and that Albrecht Dürer was one of his closest friends. We owe to the great German artist a characteristic picture of the scholar. Like Erasmus, Wilibald Pirkheimer recognized the necessity for reform in the Church in Germany, and at the beginning of the reform movement he sided with Luther and wrote in defence of the German reformer and the doctrines that he was teaching. In the course of a few years, however, he came to see that the religious revolt, far from correcting the evils, was emphasizing them, and besides was so disturbing men's minds in Germany as to make the proper cultivation of the fine arts and literature impossible. In addition he soon learned that the so-called reformers were bent on disturbing the convent in Nuremberg in which so many of his feminine relatives found not only peace and happiness and the opportunity to cultivate the spiritual life, but also to live the intellectual life to the full measure of their desires. Charitas, his sister, was the Abbess of the Convent of St. Clare, and among the nuns there were another sister, Clare, and Wilibald's daughters, Catherine and Crescentia. He wrote a defence of the monastic life for women, in which he pointed out the opportunities for peace, and joy in the cultivation of the intellectual life, as well as the spiritual life, enjoyed in these institutions. During the writing of this apologetic work he became himself entirely convinced of the necessity for adherence to the old Church.

The relations of the humanists, the classical scholars and devotees of the New Learning in Germany, to the Church have been the subject of many and varying opinions. Sandys has summed this up very well in a paragraph which deserves to be quoted because of the importance of the subject, the authority of the writer and the probability that the position which he occupies as regards both Germany and the Church make him, as far as is possible in a subject so fraught with personal feelings, an impartial critic. He said (page 258):

"The humanists of Germany may be divided into three successive schools distinguished from one another in their relation to the Church. (1) The Earlier or Scholastic Humanists, who were loyal supporters of the Church, while they were eager for a revival of classical learning and a new system of education. They are represented by the three great teachers of North Germany, Rudolfus Agricola, Rudolf von Langen and Alexander Hegius; also by Wimpheling, the restorer of education in South Germany; by Trithemius, one of the founders of the Rhenish Society of Literature, and by Eck, the famous opponent of Luther. They worked for the revival of learning in all branches of knowledge, while they hoped that the New Learning would remain subservient to the old theology. (2) The Intermediate or Rational Humanists, who took a rational view of Christianity and its creed, while they protested against the old scholasticism, and against the external abuses of the Church. 'They either did not support Luther, or soon deserted him, being conscious that his movement would lead to the destruction of all true culture.' Their leaders were Reuchlin and Erasmus, Conrad Muth, the Canon of Gotha. 'Their party and its true work of culture were shipwrecked by the tempest of the Reformation.' (3) The Later or Protestant Humanists, who were ready to 'protest' against everything, young men of great talent, but of less learning, whose love of liberty sometimes lapsed into license. Their leading spirit was Ulrich von Hutten. In course of time, some of them became Rational Humanists; others, supporters of Luther. 'While Erasmus, Reuchlin and Muth viewed Luther's propaganda with distrust,' these younger Humanists 'flocked to the new standard of protest and revolt, and so doing brought culture into disgrace and shipwrecked the Revival of Learning in Germany.'"

The earlier German humanists were not carried away by the idea that the only thing worth while studying was the New Learning, and that only the classics of Greece and Rome could form the proper substance of any right education. In the later period of German humanism this exaggeration was very common. In the earlier period, however, the place and the value of the German language itself is recognized, and due acknowledgments were made to the men of the later Middle Ages for all that they had accomplished for scholarship and for real progress in philosophy and theology. Janssen in the third volume of his "History of the German People" has sketched this very clearly (pages 1-3):

"The earliest humanists had contemplated classical antiquity from the point of view of absolute faith in Christianity, and they had pressed the classics into the service of their creed. They valued the works of the ancient writers for the deeply religious nature of the ideas embodied in them; they regarded them as echoes of primæval inspiration; but they were at the same time decided and active opponents of mere pagan systems of thought and life. They studied antiquity in a scientific spirit of exhaustive research, and they justified their incorporation of pagan materials into their systems of culture on the plea that these classic works were an indispensable groundwork of scholarship, a splendid means of mental gymnastic training for forming independent judgment and sharpening the intellect for the apprehension and presentation of truth. By the profounder knowledge they acquired of the intellectual life of the ancient world, they hoped to facilitate the understanding of the Scriptures and to put fresh life and reality into the contemporary systems of philosophical and theological study. It was this motive that had inspired the unwearied labors of Nicholas of Cusa and his pupil Agricola in their efforts to graft the study of classic literature on the German University curriculum; that had led Alexander Hegius to make the classics the groundwork of education, and Jacob Wimpheling to write his epoch-making words. 'It is not the story of the heathen writers in itself which is dangerous to Christian culture,' said the latter, 'but the false apprehension and handling of them. It would undoubtedly be absolutely fatal if, as is often the case in Italy, by means of the classics, pagan ways of thought and life, prejudicial to pure Christian morality and the patriotic spirit of the rising generation, were spread abroad or were to creep into the teaching of our writers and poets. But, on the other hand, the legitimate use of the ancient writers might render the most invaluable services to Christianity and learning. Had not the Fathers of the Church themselves derived the greatest help in their explanations of Scripture from the study of these profane writers, and had they not in consequence recommended them to the veneration of Christian students? St. Gregory Nazienzen,' he went on to say, 'had described the opponents of classic study as the enemies of true learning, and Pope Gregory the Great had shown conclusively that classic study was a useful preparation and an indispensable aid to the understanding of theology.'

"For the same reasons the leading theologians of the fifteenth century, Heynlin von Stein, Gregory Reisch, Geiler of Kaisersberg, Gabriel Viel, Johannes Trithemius, had been zealous advocates and promoters of the labors of the Christian humanists.

"'With a good conscience,' says Trithemius, 'we can recommend the study of the ancient writers to all such as do not make use of them in a worldly spirit for mere intellectual sport, but for the serious cultivation of their mental powers, and who, after the example of the Fathers of the Church, seek to cull from them good fruit for the nourishment of Christian scholarship.'"

These quotations will serve to show how clearly all the value of the classical studies to scholarship, yet all the danger to real education as well as to Christianity was recognized by the scholars of this time. They represent a critical wisdom often presumed not to have been developed at this time. Critical judgment is supposed to be a much later evolution. Those who make such a presumption, however, are led by ignorance of the realities of the education and scholarship of this time which has only properly come into its own true appreciation in comparatively recent years. German scholarship during the Renaissance period, that is, in Columbus' Century before the Reformation came to disturb it, represented as fine an expression of German ability and intellectual genius as has ever come to that capable people.

CHAPTER VIII

SCHOLARSHIP OUTSIDE OF ITALY AND GERMANY

While Italy was literally the *alma mater studiorum* during the Renaissance, and Germany probably accomplished more in scholarly education at this time that influenced succeeding generations than any other country except Italy, all the countries of Europe shared very largely in the New Learning and did much for classical scholarship before 1550. Indeed, it is probable that to a great many thoroughly-educated students of this time the comparisons of achievement that I have suggested will seem invidious or at least uncalled for. Certainly no one appreciates more than I do the magnificent work of the scholarly humanists of France, Spain, Portugal and England during Columbus' Century. Each of them shared magnificently in the intellectual incentive that had been given by the reintroduction of classical studies and especially of Greek, and each of them, in fine compensation for the impetus lent them by the movement, gave back to it achievements in scholarship that swelled the tide and helped in the diffusion of Humanism throughout all of Western Europe at least. There are national accomplishments of all of these countries that are worthy of note, and each of them accomplished much at this time in education that will never be forgotten.

Probably the easiest way to tell the extent of the scholarship of France during Columbus' Century is to say that many good authorities have declared that before the end of the century France had taken away from Italy the palm for classical scholarship. The first important teacher of the French was, however, an Italian, Jerome Aleander, who arrived in France shortly after the beginning of the sixteenth century with an introduction from Erasmus. He lectured on Greek as well as Latin, and probably also on Hebrew. He became Rector of the University of Paris in 1512, but returned to Rome in 1517 and was appointed Librarian to the Vatican. His distinguished services for learning and the Church brought him a cardinal's hat, and he became one of the most prominent members of the Papal Court at this time. It was under his direction that the first Greek printing in France was done. Three of Plutarch's treatises on Morals were printed in Paris in 1509 in order to serve as text-books for his pupils.

His successor as a teacher of the classics in Paris was the distinguished Frenchman Budæus, who, before the end of his life, came to be looked upon as perhaps the most eminent of living scholars. He went on diplomatic missions to Popes Julius II and Leo X and thus became very much interested in the New Learning. He learned Greek for himself, and under Francis I and Henry II his fame as a Greek scholar, to quote Sandys,* was "one of the glories of his country." "He opened a new era in the study of Roman Law by his annotations on the 'Pandects' of Justinian, and a little later he broke fresh ground as the first serious student of the Roman coinage in his treatise '*De Asse*.' It was the ripe result of no less than nine years' research, and in twenty years passed through ten editions. Its abundant learning is said to have aroused the envy of Erasmus" (Sandys).

His devotion to study became a proverb. It is said that even on his wedding day, by an exceptional act of self-denial, he limited his time of study to three hours only. It is interesting to learn that his wife shared his enthusiasm for study at least to the extent of aiding him in every possible way by devoted attention, which prevented him from being interrupted or harassed by any cares. Once, when he was busy reading in his library, one of the servants suddenly rushed in to inform him that the house was on fire. The scholar, without lifting up his eyes from his book, simply said: "Go and tell my wife; you know very well that I must not be bothered about household matters." He suffered greatly from headaches, which the best physicians of his day vainly endeavored to cure by the application of the actual cautery to his scalp.

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* "A History of Classical Scholarship," Cambridge University Press, 1908, p. 170.

After a time, however, it was suggested to him that what was needed was not a cure, but a better regulation of his life. He learned to take long walks, and spent some time each day cultivating his garden to the great alleviation of his headaches.

His greatest contribution to the scholarship of the time was his successful urging of Francis I, helped as he was by that monarch's sister, Marguerite of Navarre, to establish the Collège de France, though for a time at the beginning it had no such ambitious title, but was called simply the Corporation of the Royal Readers. It had no official residences or even public lecture rooms. As was said at the time, "it was built on men." Budæus' statue rightly stands before the College buildings now, for he was the real founder. The amount that was accomplished for genuine education and scholarship before the buildings were erected and the machinery of a college set going shows how much more men mean than an institution.

This Corporation of the Royal Readers had at first teachers of Greek, Hebrew and Mathematics, five in number. The first two teachers in it were Pierre Danès, Danesius as he is known, who edited an important edition of Pliny and later of Justin Martyr and afterwards became Bishop of Lavaur and took an important part in the Council of Trent, and Jacques Toussain, an industrious scholar, the compiler of a Greek and Latin Dictionary. Three men are said to have attended Toussain's lectures for some time, whose influence on the after-time was to be very marked, and yet the contrast of whose characters is very striking. They were Ignatius Loyola, John Calvin and François Rabelais. Turnebus was also one of the students of Toussain, and himself later became a distinguished professor, first at Toulouse and afterwards as the successor of his master at Paris. Toussain had been famous for his erudition. He was a living library. Turnebus, though attracting great attention when a young man by his marvellous memory, became a specialist in Greek textual criticism. He published a series of Greek texts, including Aeschylus and Sophocles, just at the end of Columbus' Century, and edited Cicero's "Laws." He wrote commentaries on Varro and the elder Pliny.

We have from Montaigne, who was one of his pupils just as our century closes, a curiously interesting description of Turnebus, which serves to show that the genus professor has been at all times about the same and that his pupils have loved him

FRANCIS I LISTENING TO MACAULT'S TRANSLATION OF DIODORUS SICULUS, TITLE PAGE OF WOOD-ENGRAVING (TORY)

often just in proportion as they have found many things to laugh at in his dress and manners. It is, indeed, a distinction, however, to have been the thus beloved master of Montaigne, himself no laggard in scholarliness.

"I have seen Adrianus Turnebus, who, having never professed anything but studie and letters, wherein he was, in mine opinion, the worthiest man that lived these thousand years, . . . notwithstanding had no pedanticall thing about him but the wearing of his gowne, and some external fashions, that could not well be reduced and uncivilized to the courtiers' cut. For his inward parts, I deeme him to have been one of the most unspotted and truly honest minds that ever was. I have sundry times of purpose urged him to speake of matters farthest from his study, wherein he was so clear-sighted, and could with so quicke an apprehension conceive, and with so sound a judgment distinguish them, that he seemed never to have professed or studied other facultie than warre, and matters of state."

The French educators of this time seem to have realized very well the true meaning of education. Rabelais is usually not taken seriously, except by students of his works who have given them much attention, but his books contain a number of most interesting contributions to this subject. His striking contrast between what education had been when he was a boy and in his old age, drawn by Gargantua, represents the great advance that took place in education at this time. The paragraphs may be taken as the testimony of a contemporary to the devotion to scholarship on the part of both men and women which then developed in France. He has the usual Renaissance contempt for Gothic culture, a contempt that exists even at the present time among those who know no better.

"I had no supply of such teachers as thou hast had. The time was still dark, and savouring of the misery and calamity wrought by the Goths, who had entirely destroyed all good literature. But by Divine goodness its own light and dignity has been in my lifetime restored to letters, and I see such amendment therein that at present I should hardly be admitted into the first class of the little grammar-boys, although in my youthful days I was reputed, not without reason, as the most learned of that age. . . .

"But now all methods of teaching are restored, the study of the languages renewed—Greek, without which it is a disgrace for a man to style himself a scholar; Hebrew, Chaldean, Latin; impressions of books most elegant and correct are in use through printing, which has been invented in my time by Divine inspiration, as on the other side artillery has been invented by devilish suggestion.

"All the world is full of knowing folk, of most learned preceptors, of most extensive libraries, so that I am of opinion that neither in the time of Plato, nor Cicero, nor Papinian was there ever such conveniency for study as is seen at this time. Nor must any hereafter adventure himself in public, or in any company, who shall not have been well polished in the workshop of Minerva. I do see robbers, hangmen, freebooters, grooms, of the present age, more learned than the doctors and preachers of my time.

"What shall I say? Women and young girls have aspired to this praise and celestial manna of good learning. So much is this the case that at my present age I have been constrained to learn the Greek tongue which I had not contemned, like Cato, but which I had not had leisure to learn in my youth; and I do willingly delight myself in reading the Morals of Plutarch, the fine Dialogues of Plato, the Monuments of Pausanias, and the Antiquities of Athenæus, whilst I wait for the hour when it shall please God my Creator to call me and command me to depart from this earth."

With all his jesting, humorous spirit (some people would call it ludicrous buffoonery), Rabelais had no illusions with regard to the true meaning of education. The concluding sentences of Gargantua's letter to his son on Education may very well be taken as representing the serious side of Rabelais' views with regard to the place of religion in education and his profound recognition of the utter failure of any education which did not include moral training. His golden words, "science without conscience is the ruin of the soul," have often been quoted. It is doubtful, however, whether most people have realized how precious is the context in the midst of which these words occur. The whole passage is well worth while for educators at least to have near them:

"But because (according to the wise Solomon) wisdom entereth not into a malicious soul, and science without conscience is but the ruin of the soul, it behoveth thee to serve, love, and fear God, and in Him to put all thy thoughts and all thy hope, and to cleave to Him by faith formed of charity, so that thou mayest never be separated from Him by sin.

"Hold in suspicion the deceits of the world. Set not thy heart on vanity; for this life passeth away, but the Word of the Lord endureth for ever. Be serviceable to all thy neighbors and love them as thyself. Revere thy preceptors. Flee from the company of those whom thou wouldst not resemble, and receive not in vain the graces which God hath given thee.

"And when thou shalt perceive that thou hast attained unto all the knowledge that is acquired in those parts, return unto me, that I may see thee and give thee my blessing before I die.

"My son, the peace and grace of our Lord be with thee. Amen."

One of the important teachers at this time in France was Julius Cæsar Scaliger, born in Italy, particularly famous for the part that he took in the controversy over Ciceronianism, and who defended Cicero from the attacks of Erasmus, maintaining that the Latin orator was absolutely perfect. Scaliger is notorious for having introduced the bitterest kind of personalities into classical controversy. Unfortunately, his example was widely followed. His son is the better known Scaliger, but was only ten years old at the time our century closes. His education gives an idea of the educational methods of the century. When he was but fourteen he was required to produce daily a short Latin declamation and to keep a written record of the perennial flow of his father's Latin verse. It was thus that he acquired his early mastery of Latin. But he was already conscious that "not to know Greek was to know nothing" (Sandys).

In Spain there was a magnificent development of scholarship which began to make itself felt shortly after the discovery of America. Here, as elsewhere, contact with Italy gave the initiative. A Spanish nobleman, Guzman, who visited Italy during the Council of Florence, returned with translations of some of Cicero's works and of Quintilian, and interest was awakened. Antonio of Lebrixa, commonly called Nebrisensis, after spending twenty years in Italy, returned in 1473 to lecture at Seville, Salamanca and Alcalá and to publish grammars of Latin and Greek as well as Hebrew. After this Barbosa, a pupil of Politian, taught Greek at Salamanca. Many of the Spanish bishops who visited Rome in the performance of their ecclesiastical obligations came back with manuscripts, and above all with awakened interest in classical studies to scatter the seeds of the New Learning. Indeed, this constituted a large factor in the great movement for humanism in all the Western countries at this time.

The most important factor for Spanish culture and scholarship, however, was the famous Cardinal Ximenes, sometimes known by his family name of Cisneros. With a career of importance opening out before him in the ecclesiastical life, Ximenes, who had been the Grand Vicar to Cardinal Gonzales of Sigüenza, resigned that office to become a Franciscan of the Strict Observance. His administrative ability soon brought about his election as Guardian of his monastery, and he became known among his brethren for his devotion to the spiritual life. The year of the discovery of America he was selected as the confessor of Queen Isabella. He accepted with the condition that he should be allowed to live in his monastery and appear at Court only when sent for. He had much to do with the successful appeal of Columbus to her Majesty. Three years later he was chosen to succeed his friend Mendoza as Archbishop of Toledo. This post carried with it the Chancellorship of Castile at this time. Ximenes refused the dignity, and it was only after six months of delay, and then in obedience to the express command of the Pope, that he accepted it. As archbishop he continued to live as a simple Franciscan, devoting the greater part of the immense revenues attached to his see to the relief of the poor and particularly for the redemption of captives. Just at this time the activity of the Turks made this one of the burning social needs of the time.

Ximenes was even reprimanded, it is said, by the Pope for neglecting the external splendor that belonged to his rank. He would not wear an episcopal dress, except in such a way that his Franciscan habit might remain visible underneath. His fulfilment of his duties as Chancellor of Castile gave him ample opportunity for the exercise of his administrative ability and demonstrated his power and high sense of justice. He used his high office to the fullest extent to encourage culture and above all classical studies. In 1504 he founded the University of Alcalá, obtaining some of the most distinguished scholars from Bologna, Paris and the other Spanish universities to fill its chairs. Practically all the religious orders established houses at Alcalá in connection with the University. Among those who were attracted to Alcalá was Nuñez de Guzman, who brought out an edition of Seneca that earned the praise of Lipsius, and who besides suggested valuable emendations of Pliny's "Natural History." He also published, mainly at the suggestion of Cardinal Ximenes, it is said, an interlinear Latin rendering of Saint Basil's tract on the study of Greek literature. He is known as Pincianus from Pintia, the ancient name of Valladolid, his birthplace, and much of his enthusiasm for classical studies had been derived from visits to Italy during which he collected a number of manuscripts that he brought back with him as precious treasures.

The great work of Cardinal Ximenes, however, was the publication under his patronage of the first Polyglot Bible, known as the Complutensian Polyglot from Complutum, the ancient name for Alcalá. This occupied fifteen years, cost an immense sum of money, considerably over a million of dollars in our values, occupied a great many scholars, attracted wide attention and above all created an interest in linguistic studies that spread all over the country and was felt even in other countries. This was completed only four months before the Cardinal's death and was dedicated to Leo X. Most of the revenues of his archbishopric, which had accumulated because of his careful use of them, he left to his beloved University of Alcalá. In spite of a self-denial in the matter of food and drink that had been carried to an extent which it was feared might injure his health, and what seemed to many even at that time, a serious deprivation of sleep for prayer and study, continued amid all his great administrative work,—for he was often regent of the kingdom and displayed great ability in military organization—he lived to the age of eighty-one. He has been honored as a saint, though this honor has never been confirmed by any formal declaration.

After this, the development of scholarship was comparatively easy. Men like Vives, Vergara, who published a Greek grammar, praised by many of the scholars of the time and thoroughly appreciated by Scaliger, and Sanchez, who was professor of Greek at Salamanca when he was but thirty-one, carried on the New Learning. Sanchez' text-book on Latin syntax called "The Minerva" came to be more used throughout Europe than almost any other. Haase declared that he had done more for Latin grammar than any of his predecessors, and Sir William Hamilton, the English philosopher, even held that the study of "Minerva" with the notes of the editors was more profitable than that of Newton's "*Principia*." Sandys notes that "it is at any rate written in good Latin and the author shows a familiarity with the whole range of Latin literature as well as Aristotle and Plato."

After this, indeed, grammar, the science of language, came to a great extent to be under the domination of Spanish minds. Nuñez, or as he is known by his Latin name Nunnesius of Valencia, who studied in Paris and was professor of Greek at Barcelona, was the author of an interesting little Greek grammar which, according to Sandys, differs little from those now used in schools. With the coming of the Jesuits, Emmanuel Alvarez produced the Latin grammar in which for the first time the principles of the language were formally laid down and the fancies of ancient grammarians laid aside. It became the text-book in all the Jesuit schools, has often been reprinted since, is the foundation of all our modern Latin grammars and is said by experienced teachers to surpass all its successors. Spain did not neglect other phases of scholarship, however. Agostino, after graduation at Salamanca, taught law at Padua and at Florence, became a member of the Papal Tribunal in Rome, studying the inscriptions and ancient monuments as well as the manuscripts of the old city. Later he became the Bishop of Lerida and then Archbishop of Taragona. He published a treatise on Roman Laws, often reprinted, but his masterpiece in classical archæology was his book on coins, inscriptions and other antiquities, published originally in Spanish and attracting wide, popular attention.

Portugal follows in scholarship the rest of the peninsula and owed its initiative to contact with Italian sources. Resende taught Greek at Lisbon and Evora and counted among his pupils the famous Achilles Statius, whose career comes mainly after the conclusion of Columbus' Century, though he was twenty-six before the century closed and his scholarship is a product of our period. He won his high reputation in Rome by a work on ancient portraits and by commentaries on the "*Ars Poetica*" of Horace, when he was not yet thirty, and confirmed this by subsequent fine work on Catullus and Tibullus. He was associated with Muretus in an edition of *Propertius,* and his studies on the "Illustrious Men of Suetonius" attracted the attention of the learned world of his time and was highly praised by Casaubon. The Jesuit Father Alvarez, whose grammar I have already mentioned, though of Spanish extraction, lived in Portugal and was educated and taught there. The University of Coimbra took on renewed vigor just at the end of Columbus' Century and its classical school became famous especially under the Jesuits. The University became noted for its Teachers' College, for graduates who purposed to follow teaching as a vocation, and for its opportunities for the training of the teaching religious orders.

England was often looked upon at the beginning of the Renaissance as so distant from the centres of culture on the Continent that very little was expected of her in scholarship. Of course, the same thing was more or less true with regard to Germany, not because of distance in space, but of speech. The peoples of the Latin languages felt a brotherhood to each other which they did not share with the Germans or English, whose speech it must be confessed, somewhat after the narrow fashion of the Greeks of the older times towards all nations not Greek in origin, they considered barbarous. It is always true that nations quite fail to understand each other, and our own attitude toward Italy at the present time, though the civilization and culture of the world owes more to Italy than to all the other nations of modern history put together, is typical of this constant tendency to national misunderstanding.

The Italians were very much surprised to have pupils from England rather early in Columbus' Century, and still more surprised apparently to have them succeed admirably. They soon came to appreciate them highly, and such men as Linacre, John Free and Caius were even made teachers at Italian universities. Over and over again, the Italians expressed their gratification at the spread of scholarship among the English and their congratulations on their success in the New Learning. The congratulations were amply deserved.

Bishop Creighton, in his "Early Renaissance in England," * says that the first English humanist was Lord Grey of Codnor, who went from Balliol College to Cologne, which was famous at the time for its general culture and education, but as he desired to get classical culture more particularly, he stole away to Florence at night lest his going should be hampered by the many friends that he had made at Cologne. He found much of interest at Florence, ordered a library there and then went to Padua, where he studied for a time. He was attracted to Ferrara, however, by the reputation of Guarino, and from there went to Rome, where the scholarly Nicholas V nominated him Bishop of Ely. One of the next of the great English scholars was John Free, a physician, whose expenses during his Italian trip were paid by Lord Grey, and who had no less success among the Italian scholars. The scholarly doctor was appointed Bishop of Bath in 1465, but died before his consecration.

Perhaps the most interesting feature of Italy's welcome for these students from Britain, "which is situated outside the world," was the absolutely unprejudiced way in which they were chosen to important posts in the University in competition with the Italians. Reynold Chicheley, who studied at Ferrara under Guarino, became Rector of the universities there. John Tiptoft, Earl of Worcester, compelled to leave England by political conditions at the beginning of the latter half of the fifteenth century, went to Venice and to the Holy Land and studied Latin at Padua, visited the aged Guarino at Ferrara, as Sandys in his "History of Classical Scholarship" tells us, and heard Argyropulos lecture on Greek. The Latin oration

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* Cambridge University Press, 1895.

which he delivered in the presence of Pope Pius II (Æneas Sylvius) is said to have drawn tears of joy from the eyes of the Pope because of the feeling of satisfaction that classical scholarship was now a world possession.

Erasmus, who was certainly in a position to judge both because of his own scholarship and his many years of residence in England, wrote a letter in December, 1499, to a friend in Italy in highest praise of English scholarship. It is a panegyric of his English friends, but it is a glorious tribute:

"I have found in England . . . so much learning and culture, and that of no common kind, but recondite, exact and ancient, Latin and Greek, that I now hardly want to go to Italy, except to see it. When I listen to my friend Colet, I can fancy I am listening to Plato himself. Who can fail to admire Grocyn, with all his encyclopædic erudition? Can anything be more acute, more profound, more refined, than the judgment of Linacre? Has nature ever moulded anything gentler, pleasanter, or happier, than the mind of Thomas More?"

In England, as elsewhere, the Reformation worked sad havoc on education. The confiscation of educational endowments and the suppression of monasteries and the scattering of their libraries almost put an end to scholarship in England. The descent in education continued until the end of the eighteenth century. Only in the past hundred years has England begun to recover lost ground.

At this time men mainly studied Latin, but towards the end of the fifteenth century they took up Greek. The first Englishman who studied Greek in the revival of learning was William Selling, a Benedictine monk. Sandys tells us that "Night and day he was haunted by the vision of Italy, that next to Greece was the nursing mother of men of genius." He was the uncle of Linacre, who had the privilege of accompanying him on his embassy to the Pope in 1485. Modern English classical scholarship in both Greek and Latin begins with Linacre and his two friends, William Grocyn and William Latimer. Latimer was a great friend of Sir Thomas More. The younger of the group of English Greek scholars was William Lily, who, while on a pilgrimage to Jerusalem, studied Greek in Rhodes. He was one of the poor scholars of history who worked his way through school in the midst of all kinds of difficulties and privations. While earning his living in Venice he succeeded in keeping up his studies.

Grocyn was one of the greatest of the Greek scholars of this generation in Europe. He proved that the book known as the "Ecclesiastical Hierarchy" was not by Dionysius the Areopagite, to whom it had been so long attributed, and thus gave the first proof of the critical scholarship of English students of Greek. Still another distinguished Greek scholar was John Fisher, afterwards Bishop Fisher, whose patron, Lady Margaret, under his direction did so much for education and particularly for classical scholarship in England.

APPENDIX I

SIR THOMAS MORE AND MAN'S SOCIAL PROBLEMS

There is a very general impression that this is the first time in history that the general social problems of humanity have been taken seriously and solutions of them deliberately sought. At least there is a very prevalent feeling that no generation before our time recognized all of these problems so well as we do and seriously tried to reach rational solutions in spite of vested interests of all kinds and old-time prejudices and traditions. Because Sir Thomas More's "Utopia" represents a complete contradiction of this complacent attitude of mind toward our sociological interests, it seems worth while to quote here a series of passages from his book which illustrate very well how as a young man of twenty-seven he faced all our social problems, which are of course those of humanity at all times when in a reasonably civilized condition, and saw as clearly as anyone has ever done, and expressed quite as thoroughly, the rational solutions of them.

Perhaps the most surprising passage is that with regard to religious toleration, which in Utopia was complete. It has often been said that More himself afterwards, as Lord Chancellor, violated his own principles in the matter, but he has been ably defended from such imputations by some of the best lawyers of England. The supposed stain on his character is due to religious prejudices in those who write. After religion, the question of armament for nations is More's most important contribution to political science, and there is a full discussion of the evil of standing armies and of the foolish reasons for keeping the nations on a war footing. As might be expected, there is severe condemnation of the vulgar display of such objects as costly precious stones, and More has the children of the Utopians even make great fun of such childish barbaric tendencies. The over-value of gold is laughed to scorn. More's idea of a certificate of health before marriage anticipates many eugenic ideas of our day in a very simple way. The future Lord Chancellor had a fine appreciation for physicians, though surprisingly enough not so much for his own profession of lawyer, and his descriptions of the hospitals of Utopia shows how thoroughly they comprehended what a hospital should be and how little there is of any development in our modern plans for hospitals, though we are so inclined to think of these as a great evolution in hospital construction.

There are many other phases of thought that he introduces which are extremely interesting in our time. Indeed one can scarcely turn a page of the "Utopia" without finding that it fulfils what James Russell Lowell suggested as at least the accidental definition of a classic when he said that "to read a classic is to read a commentary on the morning paper." The books the Utopians were interested in show More's own breadth of interest in great literature, and the fact that the great scientific writers are included contradicts many modern notions as to the limitations of intellectual curiosity at this time. In Utopia they reject astrology, have music during meals, which are prepared in common, saving much time for the individuals, think that discipline is the watchword of education, have invented door springs, care for their forests, anticipating all our conservation ideas, and divided their time so that there is six hours of work and eight hours of sleep and the rest for culture and recreation. These are but examples chosen at random of the surprises that meet one constantly in the book.

The passage with regard to religious toleration is all the more striking because, written in 1515, or at the latest 1516, it represents his opinion before the beginning of Luther's disturbance and just before that series of disturbances began in Europe which during the next three centuries was to prove of such serious detriment to art and literature and education, as well as the politics of Europe. It runs as follows:

> "At the first constitution of their government, Utopus having understood that before his coming among them the old inhabitants had been engaged in great quarrels concerning religion, by which they were so divided among themselves that he found it an easy thing to conquer them, since, instead of uniting their forces against him, every different party in religion fought by themselves. After he had subdued them he made a law that every man might be of what religion he pleased, and might endeavor to draw others to it by the force of argument and by amicable and modest ways, but without bitterness against those of other opinions; but that he ought to use no other force but that of persuasion, and was neither to mix with it reproaches nor violence; and such as did otherwise were to be condemned to banishment or slavery.
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> "This law was made by Utopus, not only for preserving the public peace, which he saw suffered much by daily contentions and irreconcilable heats, but because he thought the interest of religion itself required it. He judged it not fit to determine anything rashly, and seemed to doubt whether those different forms of religion might not all come from God, who might inspire man in a different manner, and be pleased with this variety; he therefore thought it indecent and foolish for any man to threaten and terrify another to make him believe what did not appear to him true. And supposing that only one religion was really true, and the rest false, he imagined that the native force of truth would at last break forth and shine bright, if supported only by the strength of argument and attended to with a gentle and

unprejudiced mind; while, on the other hand, if debates were carried on with violence and tumults, as the most wicked are always the most obstinate, so the best and most holy religion might be choked with superstition, as corn is with briars and thorns; he therefore left men wholly to their liberty, that they might be free to believe as they should see cause; only he made a solemn and severe law against such as should so far degenerate from the dignity of human nature as to think that our souls died with our bodies, or that the world was governed by chance, without a wise over-ruling Providence: for they all formerly believed that there was a state of rewards and punishments to the good and bad after this life; and they now look on those that think otherwise as scarce fit to be counted men, since they degrade so noble a being as the soul, and reckon it no better than a beast's: thus they are far from looking on such men as fit for human society, or to be citizens of a well-ordered commonwealth; since a man of such principles must needs, as oft as he dares to do it, despise all their laws and customs: for there is no doubt to be made, that a man who is afraid of nothing but the law, and apprehends nothing after death, will not scruple to break through all the laws of his country, either by fraud or force, when by this means he may satisfy his appetites. They never raise any that hold these maxims, either to honors or to offices, nor employ them in any public trust, but despise them as men of base and sordid minds. Yet they do not punish them, because they lay this down as a maxim, that a man cannot make himself believe anything he pleases; nor do they drive any to dissemble their thoughts by threatenings, so that men are not tempted to lie or disguise their opinions; which being a sort of fraud, is abhorred by the Utopians: they take care indeed to prevent their disputing in defence of these opinions, especially before the common people: but they suffer, and even encourage them to dispute concerning them in private with their priest and other grave men, being confident that they will be cured of those mad opinions by having reason laid before them."

Standing armies would seem to be a subject that would interest statesmen mainly in the present time. It would rather be expected that we had evolved the arguments we now use against them in comparatively recent years. Some of Sir Thomas More's remarks then are extremely interesting because they show the problem as we have it fairly stated and the reasons for and against armies set forth very simply, but very emphatically. Four hundred years has made no difference in the situation, though we are prone to think of evolution as having made great changes in that length of time. Only the evils have been emphasized. More said at the beginning almost of his "Utopia":

"In France there is yet a more pestiferous sort of people, for the whole country is full of soldiers, still kept up in time of peace (if such a state of nation can be called a peace); and these are kept in pay upon the same account that you plead for those idle retainers upon noblemen: this being a maxim of those pretended statesmen, that it is necessary for public safety to have a good body of veteran soldiers ever in readiness. They think raw men

> are not to be depended on, and they sometimes seek occasions for making war, that they may train up their soldiers in the art of cutting throats, or, as Sallust observed, ‘for keeping their hands in use, that they may not grow dull by too long an intermission.’ But France has learned to its cost how dangerous it is to feed such beasts. The fate of the Romans, Carthaginians and Syrians, and many other nations and cities, which were both overturned and quite ruined by those standing armies, should make others wiser.”

And still we can find no better reason for large armies than what Thucydides called τό ἀντίπαλον δέος, “the balanced fear,” which we have come to designate by the courtlier term, the balance of power.

The passage in “Utopia” in which More discusses the wearing of fine clothes and of precious stones and jewels has often been quoted. After 400 years it will still come home with great force to all those who think seriously on the subject. Of course it is literal common sense, but then what has common sense ever availed against fashion? The mid-African wears brass rings and fancy calico because they are hard to get and expensive and therefore give distinction to their wearer. His cultured European brother—and sister—wears what is equally childish and barbaric because costly and distinctive and will doubtless continue to do so. Sir Thomas More's ideas on the subject are interesting, but will fall on quite as deaf ears in our generation as in all the others since his time.

> “I never saw a clearer instance of the opposite impressions that different customs make on people than I observed in the ambassadors of the Anemolians, who came to Amaurot when I was there. As they came to treat of affairs of great consequence, the deputies from several towns met together to wait for their coming. The ambassadors of the nations that lie near Utopia, knowing their customs and that fine clothes are in no esteem among them, that silk is despised, and gold is a badge of infamy, used to come very modestly clothed; but the Anemolians, lying more remote, and having had little commerce with them, understanding that they were coarsely clothed, and all in the same manner, took it for granted that they had none of these fine things among them of which they made no use; and they, being a vainglorious rather than a wise people, resolved to set themselves out with so much pomp that they should look like gods and strike the eyes of the poor Utopians with their splendor. Thus three ambassadors made their entry with a hundred attendants, all clad in garments of different colours, and the greater part in silk; the ambassadors themselves, who were of the nobility of their country, were in cloth of gold, and adorned with massy chains, earrings, and rings of gold; their caps were covered with bracelets set full of pearls and other gems—in a word, they were set out with all those things that among the Utopians were either the badges of slavery, the marks of infamy, or the playthings of children. It was not unpleasant to see, on the one side, how they looked big, when they compared their rich habits with the plain clothes of the

Utopians, who were come out in great numbers to see them make their entry; and, on the other, to observe how much they were mistaken in the impression which they hoped this pomp would have made on them. It appeared so ridiculous a show to all that they never stirred out of their country, and had not seen the customs of other nations, that though they paid some reverence to those that were the most meanly clad, as if they had been the ambassadors, yet when they saw the ambassadors themselves so full of gold and chains, they looked upon them as slaves and forbore to treat them with reverence. You might have seen the children who were grown big enough to despise their playthings, and who had thrown away their jewels, call to their mothers, push them gently, and cry out, 'See that great fool, that wears pearls and gems as if he were yet a child!' while their mothers very innocently replied, 'Hold your peace! this, I believe, is one of the ambassadors' fools.' Others censured the fashion of their chains, and observed, 'that they were of no use, for they were too slight to bind their slaves, who could easily break them; and, besides, hung so loose about them that they thought it easy to throw them away, and so get from them.' But after the ambassadors had stayed a day among them, and saw so vast a quantity of gold in their houses (which was as much despised by them as it was esteemed in other nations), and beheld more gold and silver in the chains and fetters of one slave than all their ornaments amounted to, their plumes fell, and they were ashamed of all that glory for which they had formerly valued themselves, and accordingly laid it aside—a resolution that they immediately took when, on their engaging in some free discourse with the Utopians, they discovered their sense of such things and their other customs. The Utopians wonder how any man should be so much taken with the glaring, doubtful lustre of a jewel or a stone, that can look up to a star or to the sun himself; or how any should value himself because his cloth is made of a finer thread; for, how fine soever that thread may be, it was once no better than the fleece of a sheep, and that sheep was a sheep still, for all its wearing it." (John G. Saxe told the last generation how great a difference it made whether one wore the product of an India plant or an India worm.)

Immediately following this there is almost a more striking passage with regard to wealth and the changes that it makes in the attitude of the minds of men towards one another that would seem surely to have been written by a modern socialist.

"They wonder much to hear that gold, which in itself is so useless a thing, should be everywhere so much esteemed that even man, for whom it was made, and by whom it has its value, should yet be thought of less value than this metal; that a man of lead, who has no more sense than a log of wood, and is as bad as he is foolish, should have many wise and good men to serve him, only because he has a great heap of that metal; and that if it should happen that by some accident or trick of law (which sometimes reduces as great changes as chance itself) all this wealth should pass from the master to the meanest varlet of his whole family, he himself would very soon become one of his servants, as if he were a thing that belonged to his wealth, and so were bound to follow

> its fortune! But they much more admire and detest the folly of those who, when they see a rich man, though they neither owe him anything, nor are in any sort dependent on his bounty, yet, merely because he is rich, give him little less than divine honors, even though they know him to be so covetous and base-minded that, notwithstanding all his wealth, he will not part with one farthing of it to them as long as he lives!"

Perhaps his greatest contribution to social ethics and the solution of social problems is to be found in his emphatic assertion of the right of the laborer to a living wage in the best sense of that much abused term and his insistent deprecation of the fact that laborers must not be exploited so as to enable men to accumulate great wealth that is sure to be abused. More believed in profit-sharing very heartily and had no hesitation in expressing himself. Above all, he deprecates the injustice worked by predatory wealth. It was the judicial mind of the greatest Lord Chancellor England has ever had, who, after speaking of the Utopian state as "that which alone of good right may claim and take upon it the name of commonwealth," continues:

> "Here now would I see, if any man dare be so bold as to compare with this equity, the justice of other nations; among whom, I forsake God, if I can find any sign or token of equity and justice. For what justice is this, that a rich goldsmith, or an usurer, or to be short, any of them which either do nothing at all, or else that which they do is such that it is not very necessary to the commonwealth, should have a pleasant and a wealthy living, either by idleness or unnecessary business, when in the meantime poor laborers, carters, ironsmiths, carpenters, and ploughmen, by so great and continual toil, as drawing and bearing beasts be scant able to sustain, and again so necessary toil, that without it no commonwealth were able to continue and endure one year, should get so hard and poor a living, and live so wretched and miserable a life, that the state and condition of the laboring beasts may seem much better and healthier? . . . And yet besides this the rich men, not only by private fraud but also by common laws, do every day pluck and snatch away from the poor some part of their daily living. . . . They invent and devise all means and manner of crafts, first how to keep safely without fear of losing that they have unjustly gathered together, and next how to hire and abuse the work and labor of the poor for as little money as may be. These devices when the rich men have decreed to be kept and observed under color of the commonalty, that is to say, also of the poor people, then they be made laws. . . . Therefore when I consider and weigh in my mind all these commonwealths which nowadays anywhere do flourish, so God help me, I can perceive nothing but a certain conspiracy of rich men procuring their own commodities under the name and title of commonwealth."

Everywhere one finds supreme common sense. For instance, Sir Thomas More points out that while the Utopians "knew astronomy and were perfectly acquainted with the motions of the heavenly bodies; and of many instruments, well contrived and divided, by which they very accurately compute the course and positions of the sun, moon and stars; but for the cheat of divining by the stars, by their oppositions or conjunctions, it has not so much as entered into their thoughts." This sentence was written about the time that Copernicus was working out his conclusions with regard to the Universe as we now know it. Most people might presume that astrology had by this time lost all its weight. More than a century later, however, Galileo and Kepler were drawing up horoscopes, and astrology was very commonly accepted during the seventeenth century. Even in the eighteenth century, Mesmer wrote a thesis for his doctorate at the University of Vienna on the influence of the stars on human constitutions. The really great thinkers in humanity had all of them refused to accept astrology, but it is a tribute to the genius of this man of thirty-seven who had been trained at the law to have reached so true a conclusion.

Almost any page of "Utopia" furnishes a quotation that shows how penetrating was More's view of the significance of life not alone for his own time, but for all time. Literally I turned over the page from the quotation with regard to astrology and find this: "A life of pleasure is either a real evil, and in that case we ought not to assist others in their pursuit of it, but on the contrary to keep them from it all we can as from that which is most hurtful and deadly; or if it is a good thing, so that we not only may but ought to help others to it, why then ought not a man to begin with himself?" He has many sentences on that page with reference to the philosophy of what we now call learnedly hedonism. "They infer that if a man ought to advance the welfare and comfort of the rest of mankind, nature much more vigorously leads them to do this for themselves. They define virtue to be living according to nature, so they imagine that nature prompts all people on to seek after pleasure as the end of all they do."

Ideas with regard to many modern questions are touched on only in passing and yet with sufficient detail to make us realize that problems that we are sometimes likely to think of as new were faced and solved in that older time. For instance, the question of afforestation and the necessity for keeping up a readily available supply of wood is touched on.

> "For one may there see reduced to practice not only all the art that the husbandman employs in manuring and improving an ill soil, but whole woods plucked up by the roots, and in other places new ones planted, where there were none before. Their principal motive for this is the convenience of carriage, that their timber may be either near their towns or growing on the banks of the sea, or of some rivers, so as to be floated to them; for it is a harder work to carry wood at a distance over land than corn."

One might think that perhaps so practical a man as More would not believe in the usefulness of books for his ideal republic and it might even be thought that, devoted to law and to politics, he would not be over-familiar with the classic authors. Here is his paragraph on the subject, however, that reveals at once his estimation and his tastes.

> "I happened to carry a great many books with me, instead of merchandise, when I sailed my fourth voyage; for I was so far from thinking of soon coming back that I rather thought never to have returned at all, and I gave them all my books, among which were many of Plato's and some of Aristotle's works: I had also Theophrastus on 'Plants,' which, to my great regret, was imperfect; for having laid it carelessly by, while we were at sea, a monkey had seized upon it, and in many places torn out the leaves. They have no books of grammar but Lascaris, for I did not carry Theodorus with me; nor have they any dictionaries but Hesichius and Dioscorides. They esteem Plutarch highly, and were much taken with Lucian's wit and with his pleasant way of writing. As for the poets, they have Aristophanes, Homer, Euripides, and Sophocles of Aldus's edition; and for historians, Thucydides, Herodotus and Herodian."

His description of how the Utopians divide up their time is interesting from many standpoints. Six hours of work, eight hours of sleep and the rest to be employed in learned leisure with lectures, sports, games and various exercises is indeed an ideal that human nature would find hard to surpass at any period of the world's history. Such a division would probably make for human health and happiness better than anything that has ever been tried.

> "But they, dividing the day and the night into twenty-four hours, appoint six of these for work, three of which are before dinner and three after; they then sup, and at eight o'clock, counting from noon, go to bed and sleep eight hours: the rest of the time, besides that taken up in work, eating, and sleeping, is left to every man's discretion; yet they are not to abuse that interval to luxury and idleness, but must employ it in some proper exercise, according to their various inclinations, which is, for the most part, reading. It is ordinary to have public lectures every morning before daybreak, at which none are obliged to appear but those who are marked out for literature; yet a great many, both men and women, of all ranks, go to hear lectures of one sort or other, according to their inclinations: but if others that are not made for contemplation, choose rather to employ themselves at that time in their trades, as many of them do, they are not hindered, but are rather commended, as men that take care to serve their country. After supper they spend an hour in some diversion, in summer in their gardens, and in winter in the halls where they eat, where they entertain each other with music or discourse. They do not so much as know dice, or any such foolish or mischievous games. They have, however, two sorts of games not unlike our chess."

Probably the most striking testimony to the life and character of Sir Thomas More is to be found in the fact that writers who have studied his career most carefully are agreed that he exemplified all the great principles that he has laid down in his "Utopia" in his own environment and family life. Maurice Adams, in his Introduction to the Camelot edition of the "Utopia," says:

> "Utopia was but the author's home writ large. His beautiful house, on the river side at Chelsea, was, through his delight in social life and music, and through the wit and merriment of his nature, a dwelling of joy and mirth as well as of study and thought. It often rang with song, and was cheery with the laughter of children and grandchildren, he himself, in his own words, 'being merry, jocund and pleasant among them.' Erasmus, who was often his guest, has given us many delightful glimpses of his family life, of his children and their tasks, and the monkey and rabbits which amused their leisure. To the solitary and ever-wandering Erasmus, More's house was a haven of refuge from the discomforts and vexations of his bachelor existence. In one of his epistles he writes, 'More has built near London, upon the Thames, a modest yet commodious mansion. There he lives, surrounded by his numerous family, including his wife, his son and his son's wife, his three daughters and their husbands, with eleven grandchildren. There is not any man living so affectionate to his children as he, and he loveth his old wife as if she were a girl of fifteen. Such is the excellence of his disposition that whatever happeneth that could not be helped, he is as cheerful and as well pleased as though the best thing possible had been done. In More's house you would say that Plato's academy was revived again, only, whereas in the academy the discussion turned upon geometry and the power of numbers, the house at Chelsea is a veritable school of Christian religion. In it is none, man or woman, but readeth or studieth the liberal arts, yet is their chief care of piety. There is never any seen idle; the head of the house governs it: not only by a lofty carriage and oft rebukes, but by gentleness and amiable manners. Every member is busy in his place, performing his duty with alacrity; nor is sober mirth wanting."

APPENDIX II

AFTER THE REFORMATION

It is such a commonplace of history as written in English, at least, that the beginnings of our modern progress are to be traced to the time when the movement called the Reformation freed men's minds from the domination of the Church, which had used every effort to keep men in darkness in order to secure their readier submission to Church teaching, that the tracing of all our modern developments to the century before the movement began may surprise many readers. Not only is it true, however, that for nearly a hundred years before the Reformation was there a climax of intellectual and artistic achievement in every department in every country in Europe, but what is much more striking is that immediately after the "reform" movement set in, decadence made itself felt everywhere. Art in all its phases, painting, sculpture, architecture, education and scholarship, literature, and, above all, humanitarianism, reached magnificent expression during the first three quarters of Columbus' Century. In the fourth quarter, coincident with the spread of the reforming doctrines, decadence begins in nearly every phase of human activity and continues until the revolutions of the late eighteenth and early nineteenth centuries gave a new stimulus to independent thinking. It has seemed necessary, owing to the position taken in the preceding pages, to illustrate these facts by quotations from well-known non-Catholic writers.

No fallacy is cheaper than that of arguing because one set of events happens after another, therefore it is due to that other. It would take a much deeper and broader study of history than any that we have made here, or could make in our limited space, to trace the philosophy of the history of Columbus' Century and the succeeding centuries and to indicate the causes at work and their effects. All that can be pointed out here is that the facts of intellectual history represent an exact contradiction to the usually accepted impression that whatever is best in the modern time can be traced to the Reformation. On the contrary, immediately after the reform movement, human achievement declined for many generations, and the revival of the past hundred years represents a reversion to ideas and modes of thought current before the religious revolt and the evolution of which was interrupted by that movement.

EDUCATION, BOOKS, INSTITUTIONS

An historical opinion which is considered by a great many people who are sure that they are well informed to be quite above all question, is that the Reformation had a wonderfully beneficial effect on education. As a matter of fact, education, which had been at a very high degree of cultivation during the Renaissance period, began to decline immediately after the Reformation nearly everywhere in Europe, and only for the schools of the Jesuits, would have reached a serious depth of degradation. As it was, there is a steep descent in the Protestant countries, until in the eighteenth century Cardinal Newman thought that education at Oxford was at its lowest possible ebb, and when Winckelmann wanted to teach Greek in Germany he had to have his pupils write out copies of Plato, because no edition of the author had been issued in that country for two centuries. Authorities in the history of education have emphasized this, and no one more so than Professor Paulsen, who, after a wide academic experience throughout Germany, held at the end of his life the chair of philosophy at the University of Berlin. His book on the history of German education was translated into English and published with an introduction by President Nicholas Murray Butler of Columbia University. One does not have to go very far in it before finding the great German authority's opinion with regard to the influence of the Reformation on education. He says:

> "After 1520, Humanism, an aristocratic and secular impulse, was overtaken and succeeded by a movement of vastly greater power and depth, the religious and popular movement of the Reformation. For a brief space the Reformation may well have seemed a reinforcement of Humanism, united as both these were in their hatred of scholastic philosophy and of Rome. Hutton and Luther are represented in pamphlets of the year 1520 as the two great champions of freedom. Inwardly, however, they were very different men, and very different were the goals to which they sought to lead the German people. Luther was a man of inward anti-rationalistic and anti-ecclesiastical religious feeling, and Hutton a man of rationalistic and libertinistic humanism. Hutton did not live to see the manifestation of this great contrast; but after 1522 or 1523, the eyes of the Humanists were open to the fact, and almost without exception they turned away from the Reformation as from something yet more hostile to learning than the old Church herself. In very truth, it appeared for the time as if the Reformation would be in its effects essentially hostile to culture. In the fearful tumults between 1520 and 1530 the universities and schools came to an almost complete standstill, and with the Church fell the institutions of learning which she had brought forth, so that Erasmus might well say, 'Where Lutheranism reigns, there is an end of letters.'"

Those who hold a brief for the Reformation and its much vaunted beneficent influence on education may be tempted to retort that at least the German religious movement gave liberty of teaching to the German University. It is a constantly emphasized Protestant tradition that the incubus of the Church on teaching institutions before this time had been most serious in its consequences, and that developments in education had been prevented because of this. Those who assume that the reformers, so-called, introduced academic liberty into Germany will find very little support for any such claim in Professor Paulsen. Paulsen insists that exactly the opposite is true, and that far from bringing freedom of thought, the new religious movement still further shackled university and teaching freedom and the liberty of speech and writing, so that a sadly stilted period of educational development comes on the scene in Germany. He talks from the standpoint of his own department of philosophy, and evidently resents the shackles that were placed on freedom of speculation at this period.

> "During this period also a more determined effort was made to control instruction than at any period before or since. The fear of heresy, the extra anxiety to keep instruction well within orthodox lines, was not less intense at the Lutheran than at the Catholic institutions—perhaps it was even more so, because here doctrine

> was not so well established, apostasy was possible in either of two directions, Catholicity or Calvinism. Even the philosophic faculty felt the pressure of this demand for correctness of doctrines. Thus came about these restrictions within the petty States and their narrow-minded established churches, which well-nigh stifled the intellectual life of the German people."

A good deal of the misunderstanding of the effect of the reform movement on education is due to the fact that the novelty of the reformers' doctrines in religion and theology led to the use sometimes of the term, the New Learning, for their teaching. The same term, however, had come to be used for the study of the Latin and Greek classics, and the supposed opposition of the Church to the humanistic teachings is founded on the confusion of these two terms. Of course the ecclesiastics of the old Church opposed the New Learning in as far as it related to the reformers' doctrines with regard to free will, the lack of merit in good works and denials of other religious doctrines. They were, however, the most ardent patrons of the New Learning in as far as that term may be applied to the study of the classics. As a matter of fact, the Jesuits, founded at this time, based all their teaching on the classics and their schools spread all over Europe.

As to the lack of interest in books, in education, in scholarship, even in the preservation of the great monuments of national literature after the change of religion in England, the easiest way to know it is to read Bishop Bale's account of what happened to the valuable books which had belonged to the old monastic and educational institutions at the Reformation. He approved of the suppression of the monasteries and was an ardent reformer, but he cannot help calling attention to the absolute neglect of the treasures of literature, not only on the part of the nobility and the common people, but on the part of the very universities themselves. It is easy to understand what an awful state of affairs there must have been to draw this indignant protest from so good a king's man and follower of the new order and protestant against everything Catholic. Bishop Bale said, in his preface to Leland's "New Year's Gift to Henry VIII," in 1549:

> "Never had we been offended for the loss of our libraries, being so many in number and in so desolate places, for the more part, if the chief monuments and most notable works of our excellent writers had been preserved. If there had been in every shire of England but one solemn library for the preservation of those noble works and preferment of good learning in our posterity, it had been yet somewhat. But to destroy all without consideration, a great number of them which purchased those superstitions mansions reserved of those library books . . . some to scour their candlesticks, and some to rub their boots. Some they sold to the grocers and soap-sellers, and some over sea to the book-binders, not in small number, but at times whole ships full to the wondering of

> the foreign nations. Yea, the universities of this realm are not all clear in this detestable fact. But cursed is . . . (he) which seeketh to be fed with such ungodly gains and so deeply shameth his natural country. I know a merchant man, which shall at this time be nameless, that bought the contents of two noble libraries for forty shillings' price, a shame it is to be spoken. This stuff hath he occupied in the stead of gray paper by the space of more than these ten years, and yet he hath store enough for as many years to come. I judge this to be true, and utter it with heaviness, that neither the Britains under the Romans and Saxons, nor yet the English people under the Danes and Normans, had ever such damage of their learned monuments as we have seen in our time."

It used to seem some condonation of these sad evils to say that the suppression of the monasteries was brought because of the evil lives of the monks. Protestant historians were wont to proclaim that they were plague-spots of immorality which had to be eradicated. The careful investigation of historians in our time has completely refuted any such conclusion as this. A few of the smaller monasteries were found not to be living up to their high ideals. A few, but a very few monks, were found to be unworthy of their calling. Even with all the desire that there was to discredit them, nothing could be found to say against the greater monasteries, and the governments had to employ other means in order to bring about their suppression with some shadow of legality. Creatures of the king were forced into the position of abbot and then by prearrangement surrendered the monasteries and their possessions to the crown. Every advance in citical history in modern times has tended more and more to the vindication of the monks.

An American in our own time might well be expected to hold the balance straight without disturbance from old-time prejudices. Rev. Dr. George Hedges, Dean of the Episcopal Theological School, of Cambridge, Mass., in his "Fountains Abbey: The Story of a Medieval Monastery," said (p. 88):

> "The quiet judgment of the modern historian is in favor of the monks, and finds most of them to have been men of respectable and pious lives. The sober persons in white cassocks, who confessed faults in the chapter meeting and cheerfully suffered chastisement for them to which the man in the street gave not a moment's thought, had a passionate longing to be good. They were intent upon the living of a righteous life."

He says, further quoting from Burke, "An enemy is a bad witness; a robber is a worse."

EFFECT ON ART

It is generally recognized now that the religious revolt ruined art. Religion had supplied the motives for great art, but most of these, and especially the tender feeling of reverence for the Mother of God and of the saints and the belief in angels, disappeared at this time or were sadly hampered in their expression, and the whole tendency of the reform movement was iconoclastic. Image worship was one of the bitterest imputations against the old Church. It is curiously interesting to note that just in as much as art has developed in Protestant countries again, the churches have been raised from bare conventicles and meeting-houses to shrines of artistic beauty once more. It must not be forgotten, however, that this is quite contrary to the "protests" that were originally made against the old Church and that the ideas involved in this rejection of art in the Church, helped to lead many in artistic uncultured minds away from Catholicity in that time of storm and stress.

In his chapter on Parish Life in England in his well-known book, "Before the Great Pillage," Rev. Augustus Jessop, who in spite of his bitter condemnation of what happened at and after the Reformation, has never, I believe, become a Catholic, tells of the marvellous beauty of the Church structures in the ages which used to be called dark and are now known to be full of light, and then tells what happened after the so-called Reformation.

> "*And we get fairly bewildered by the astonishing wealth of skill and artistic taste and æsthetic feeling which there must have been in this England of ours, in times which till lately we had assumed to be barbaric times.* Bewildered, I say, because we cannot understand how it all came to a dead stop in a single generation, not knowing that the frightful spoliation of our churches and other parish buildings, and the outrageous plunder of the parish guilds in the reign of Edward the Sixth by the horrible band of robbers that carried on their detestable work, effected such a hideous obliteration, such a clean sweep of the precious treasures that were dispersed in rich profusion over the whole land, that a dull despair of ever replacing what had been ruthlessly pillaged crushed the spirit of the whole nation, and *art died out in rural England, and King Whitewash and Queen Ugliness ruled supreme for centuries.*" (Italics ours.)

Under art is, of course, included sculpture and architecture, as well as many of the artistic crafts. It is easy to understand that under the influence of the carping spirit of the Reformation all of these became decadent. Men gave up old-time faith for individual judgment of religious truth. The sterilizing influence of the controversial period which followed can be readily understood. Gerhard Hauptmann, the German dramatic poet, to whom the Nobel Prize for literature was recently awarded, characterized this decadence of art under the reformers in a very striking passage.

> "I, as a Protestant, have often had to regret that we purchased our freedom of conscience, our individual liberty, at entirely too high a price. In order to make room for a small, mean little plant of personal life we destroyed a whole garden of fancy, and hewed down a virgin forest of æsthetic ideas. We went even so far

in the insanity of our weakness as to throw out of the garden of our souls the fruitful soil that had been accumulating for thousands of years, or else we ploughed it under sterile clay.

"We have to-day, then, an intellectual culture that is well protected by a hedge of our personality, but within this hedge we have only delicate dwarf trees and unworthy plants, the poor progeny of great predecessors. We have telegraph lines, bridges and railroads, but there grow no churches and cathedrals, only sentry boxes and barracks. We need gardeners who will cause the present sterilizing process of the soil to stop and will enrich the surface by working up into it the rich layers beneath. In my workroom there is ever before me the photograph of St. Sebald's tomb. This rich German symbol arose from the invisible in the most luxurious developmental period of German art. As a formal product of that art, it is very difficult to appreciate it as it deserves. It seems to me as one of the most wonderful bits of work in the whole field of artistic accomplishment. The soul of all the great medieval period enwraps this silver coffin, giving to it a noble unity, and enthrones on the very summit of Death, Life as a growing child. Such a work could only have come to its perfection in the protected spaces of the old Mother Church."

All the arts of decoration suffered similarly and no art failed to be affected unfavorably. Music, which had had one great period of development in the old Plain Chant in the later Middle Ages under ecclesiastical influence, was just entering on another and glorious development under the patronage of the Church when the reform movement began. Plain song had given such masterpieces as the Lamentations, of which Rockstro said that no sadder succession of single notes had ever been put together, and the Exultet sung in the Mass on Holy Saturday, which he declares represents a similarly high expression of joy. Now figured and harmonic music was about to have its place. Palestrina's Masses and St. Philip Neri's Oratorios were just beginning. The reformers, however, would have nothing to do with music. Congregational singing was adopted from the old Church, but for music as an art to uplift religion and add its tribute of devotion there was no place. Part song had originated in Church ceremonials, as dramatic literature originated in the ceremonies connected with the celebration of the various mysteries. Like every other human and natural aspiration, music was under suspicion in the new religion, and the consequence was a serious detriment to the development of the art. It was not until the gradual loosening of the bonds of the Puritanic elements in the Protestant religion that music began to come to her own again.

DECLINE OF CHARITY

In humanitarianism and the solution of social problems, the Reformation was particularly backward. The leaders in the new religions were so intent upon explaining their own doctrines and modes of thinking and gathering disciples and having other people think as they did, that charitable works suffered severely. The destruction of the monasteries and convents left many needy, but there were but few to care for them. Above all, the new doctrine of justification by faith alone, which declared that good works were of no import so long as men believed in a particular way, took away the motive for much of the charitable work that had been done before. It is not surprising, then, that hospitals and the care of the ailing and the old reached a depth of degradation that is rather hard to understand. We in the twentieth century know how low hospital care and nursing had sunk in the early nineteenth century, and we have been inclined to think that it must have been much worse in the generations preceding. It is a surprise, then, to find that the first half of the nineteenth century represents what has been well called by Miss Nutting and Miss Dock, in their "History of Nursing," the Dark Period of Nursing, during which "the condition of the nursing art, the well-being of the patient and the status of the nurse all sank to an indescribable level of degradation."

Jacobson, in his Essays on "The History of Care for the Ailing,"* traces just when this decadence began, not long after the reform movement succeeded in gaining a firm foothold, and he outlines in detail just how the descent came about. He says:

> "It is a remarkable fact that attention to the well-being of the sick, improvements in hospitals and institutions generally and to details of nursing care, had a period of complete and lasting stagnation after the middle of the seventeenth century, or from the close of the Thirty Years' War. Neither officials nor physicians took any interest in the elevation of nursing or in improving the condition of hospitals. During the first two-thirds of the eighteenth century, he proceeds to say, nothing was done to bring either construction or nursing to a better state. Solely among the religious orders did nursing remain an interest, and some remnants of technique survive. The result was that in this period the general level of nursing fell far below that of earlier periods. The hospitals of cities were like prisons, with bare, undecorated walls and little dark rooms, small rooms where no sun could enter, and dismal wards where fifty or one hundred patients were crowded together, deprived of all comforts and even of necessaries. In the municipal and state institutions of this period, the beautiful gardens, roomy halls, and springs of water of the old cloister hospital of the Middle Ages were not heard of, still less the comforts of their friendly interiors."

The more careful study of the guilds, particularly, has served to show what an immense social wrong was done by this confiscation of what for the moment, strictly for government purposes, was called Church property. At the beginning of Henry VIII's reign, it has been calculated by Toulmin Smith that there were some 30,000 guilds in England. These had very large sums in their treasuries. They responded to all the social needs that we are now only just waking up to once more. They provided old age and disability pensions, insurance against fire and flood, against loss by robbery, by imprisonment, and against the loss of cattle and farm products; there were forms of insurance against the loss of sight, against the loss of a limb or any other form of crippling. The amount of money confiscated from the treasuries of these guilds has been calculated at a value in our money of several hundred millions of dollars. When it is recalled that the census of England made in Elizabeth's time, just before the Great Armada was expected, showed a total population of less than five million, the amount of good that could be accomplished by this vast sum of money, not in the hands of a few, but distributed in 30,000 treasuries and used for social purposes, can be readily understood. After the reform in England, practically no more was heard of the guilds, and social wrongs began to be multiplied.

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* Beiträge zur Geschichte des Krankencomforts, *Deutsche Krankenpflege Zeitung,* 1898, in 4 parts.

SUPERSTITION AND TORTURE

It is often said that with the Reformation came the end of superstition and of that exaggerated faith in religion which keeps people from using their reason and that over-attention to the things of the other world instead of this which keeps them from being practical and prosperous. The subsequent history, however, of the countries most affected by the German religious revolt, far from bearing out this declaration, shows how much harm came from the absence of a strong central religious authority and how much of loss to idealism there was in the diminution of the childlike faith which had meant so much, not only for religion, but for literature and for art in the preceding centuries.

There was no obliteration of superstition, but superstition changed its object, and now, instead of being poetic, often became cruel and intolerant. The witchcraft delusion, for instance, which represented the worst manifestation of superstition which mankind has perhaps ever suffered from, affected the Protestant countries much more than the Catholic countries. Thousands and thousands of people were put to death as witches in Germany, and it was from the Protestant countries that the delusion spread, by psychic contagion, to the Catholic countries of Europe. Catholic countries not in intimate relations with Protestant countries, like Ireland, were not affected by it. Though Ireland has been the most Catholic of countries, not a witch has been put to death there, by any formal process of law, for over five hundred years. Here in America the witchcraft delusion is one of the sad blots on our history. Many other forms of superstition manifested themselves, and when there were not religious motives there were other reasons. Men apparently cannot keep from being influenced by things they do not understand. Healers of all kinds take the place of the religious healing of the medieval period, and medical and scientific superstitions replace religious supercredulity. Electric belts and pads replace relics. Over-estimated remedies and utterly inefficient cures of all kinds are believed in much more now without reason than ever medieval folk allowed themselves to be carried away by religious superstitions.

A similar historical error proclaims that torture and suffering for opinions and cruel punishment went out with the Reformation, or at least wherever that movement gained a firm foothold. This is absolutely untrue, for the trials of the witches everywhere were accompanied by torture, and cruel punishments were the rule, particularly in the Protestant countries. It is rather amusing sometimes to read, in newspaper and magazine articles, descriptions of the torture of the Inquisition and the heartlessness of medieval people, ecclesiastics in the same breath with the mention of the Iron Maiden and the famous torture boots of Nuremberg. These, however, were inventions not made for the Inquisition nor for the Middle Ages, but for the post-reformation period in Protestant Nuremberg. And it must not be forgotten that Nuremberg was one of the most cultivated cities of Germany and that its people were highly educated, and that it was exactly in such a reform city that torture and cruel punishments were invented and developed. Torture was one of the modes of getting at truth for legal purposes under the Roman law. It continued almost until our own time to be a legal mode of procedure. Even at the present time it has not entirely gone out, and while the means of physical torture are removed, the "third degree" and various phases of mental torment replace them.

POLITICAL DECADENCE

Above all, the political import of this movement, so often thought to be purely religious, must not be forgotten. The nobility lost at this time, to a great extent, their independence. The king became supreme, and the new nationalism which developed in Europe knit countries and peoples very close together which had only been very loosely connected before. Ferdinand was King of Aragon and Isabella Queen of Castile when their marriage brought these kingdoms together. Subsequent developments at this time made the Spanish peninsula a unit. Practically the same thing happened in France. Pope Julius II planned a united Italy. It was scarcely half a century after the close of Columbus' Century that the Scotch and English crowns became united. Many of the great nobles of these countries lost their prestige. The foolish extravagance of the Field of the Cloth of Gold is said to have cost many a nobleman of France and England his estates, or at least made him absolutely independent in the favor of the king.

In the midst of this political revolution a change in the prevailing religion made a very valuable asset for monarchs whose position was not over-secure or whose treasury was exhausted, for it handed over to them the care of the Church and its property as well as of the State and its revenues. This enabled them to confiscate large sums of money, to confer Church estates on noble favorites; but, above all, it left them without any strong organized ethical factor within the State to oppose any acts of injustice that they might do. Their Lord Chancellors had been bishops before, but now they were political favorites and often the veriest of time-servers. Lord Campbell's characterization of some of the English post-reformation chancellors is illuminating for this. The amount of political injustice that resulted is easy to understand, though it is not easy to comprehend how the people stood it.

The constitution of the English House of Lords since the Reformation represents, by contrast, in a very striking way the difference between the old and the new in political matters. At the present time the House of Lords is almost exclusively hereditary. About one-seventh of its members are there by appointment or election, and a large part of even this moiety is chosen from the descendants of the hereditary nobility. Before the Reformation sixty per cent of the House of Lords consisted of the Lords Spiritual. Many of these were Bishops, but more of them were Abbots and Priors of Religious Houses, Masters and Generals of Religious Orders and other officials representing the monasteries as large landholders, who at the same time represented considerable bodies of peasantry, tillers of the soil of monasteries, who were so happy, as was often said, to be under the cross. Not a few of the bishops were the self-made sons of the middle class, or even the poor. A great many of the abbots and representatives of religious orders came from even the lower orders. They were men who had been chosen by their fellow-religious to rule over them because they were considered to have the best qualities of heart and soul for such positions. In the course of centuries a great many of these men were saints, that is, represented that character and disposition which made the men of the after-time declare that they had lived heroic lives of unselfishness and care for others.

It is true that at times some of the Lords Spiritual were the sons of the nobility, favorites of kings, men who used political influence in order to secure Church preferment; but the proportion of these was never very large, and while many are known, it is because the history of many centuries is gone over for them. Probably no better second chamber for conservative legislation could possibly be organized than this one of the House of Lords before the Reformation actually was. The majority of the men in it were representatives, not of one class, but of all the classes of England. There were always many peasants' sons and the sons of little tradesmen, and these men had often risen by merit and yet only under such circumstances as precluded family ambition at least, and usually their advancement was due to their known lack of personal ambition. As a rule, their unselfishness had been the principal trait by which they secured preferment. They had the best interests of the poor classes particularly at heart. Without any chance for ambition for themselves, without any desires for the enrichment of a family which did not exist for them, there were as many safeguards around their fulfilment of their duty as representatives of the people as can possibly be drawn. Even such safeguards will not prevent all abuses, but they come as near doing it as is possible. Nothing is more illuminating, as regards political conditions from a social standpoint, than this comparative study of the pre-reformation House of Lords with that of the present.

In political freedom, the times after the Reformation represent decadence mainly because of the placing in the hands of the civil government the authority in both political and religious matters. As a consequence of the elimination of the Church authorities as independent factors in the life of the people instead of subservient to government officials, there was a serious inroad upon the rights as citizens that had been obtained by hard striving during preceding centuries. Modern political developments are not so much a new assertion of modern democracy as a reversion to the democratic principles of the Middle Ages. That will seem to many people profoundly paradoxical. It is only a paradox, however, to those who do not know the political life of the Middle Ages. Magna Charta was drawn up and signed, the fundamental laws of Spain and France adopted, the Golden Bull in Hungary promulgated, and the Swiss declaration of independence issued all in a single century of the preceding time—the thirteenth. Such principles as that there shall be no taxation without representation were then formulated, and the free cities acquired rights for their citizens and laid the foundation of that government of the people, by the people and for the people which is the basis of modern democracy. All this was seriously disturbed at the time of the reform movement, and a decadence similar to that which took place in humanitarianism and the hospital and nursing movement may be traced with regard to political liberty. It culminated at the end of the eighteenth century in that awful cataclysm of the French Revolution which tried to reassert all the old principles of political freedom and correct all the abuses at once and right the cumulated wrongs of centuries that was doomed to failure. The series of revolutions of the early nineteenth century were needed to give people back something like the rights that they had had in the Middle Ages and to create a public sentiment once more favorable to democratic institutions. Hilaire Belloc, who probably knows the French Revolution as well as any in our generation, declared not long since that it represented an effort to bring the world back to those ideals of democracy which had developed in the Middle Ages. Our period represents exactly the end of the Middle Ages, and it is after the Reformation that the decadence of the fine old democratic spirit which had been fostered within the bounds of the old Church may be noted.

Above all, popular happiness decreased and indeed almost disappeared throughout Europe as the result of the reform movement. Before that, the Church holy days, nearly twoscore in number in the year, provided ample opportunities for leisure and recreation, and the Church societies, by the giving of the mystery and morality plays, and the guilds by their banquets and outdoor meetings, the various "ales," as they were called, had furnished frequent occasions for hearty, healthy amusement. All this stopped with the Reformation. Puritanical conceptions of religion rubbed the holy days, that were also holidays, out of the year. We are now engaged in putting them back as anniversaries of national events and of the births of national heroes instead of the celebrations of Christian feasts and saints' days, as bank holidays and memorial days of various kinds. The sects became so much occupied with discussions of dogma that they took almost no interest in the amusements of the people. Now men met to dispute over doctrines that they could not understand, and instead of the beautiful ceremonies of the old religion, with their satisfying appeal to all the senses and their charm and teaching quality, even as mere spectacles, they listened to long-winded, dry-as-dust sermons as a matter of duty, and went home to sit gloomily in darkened rooms for the observance of what they called the Sabbath. Before the Reformation, the people, after the Church services, used to meet for games and recreation upon the green in front of the Church, and the young folks had had opportunities for their Sunday pleasures of all kinds. Only in recent years, with the breaking up of the bonds of Protestantism, have we gone back to revive medieval ways.

The nations drew away from each other, and the internationalism that had been developing and that had been fostered by community of Church interest disappeared. National governments became more consolidated, but the peoples became more and more separated in sympathy. Until commerce developed in the modern time, that fine internationalism which had so often been exhibited in spirit, at least during the Middle Ages, was at an end. The Crusades had done much to break down the barriers of narrow nationalism.

The religious orders had still further fostered intercourse and increased sympathy among the nations. The universities, with their various nations among the students, had been nurturing grounds for better feeling among men. All this was now practically at an end. Not only that, but sectionalism in politics and sectarianism in religion drew men farther and farther apart and made them look upon those of other nations with less and less sympathy. The political change made for the concentration of power in the hands of rulers and the strengthening of the states for war, but it took away many of the rights of men and, above all, lessened their sympathies for their kind, except among their own people, and obliterated that spirit of good fellowship among the educated and cultured people of the world which had been so well nurtured in the time before. It is only during the later nineteenth century that there has come to be that spirit of friendly intercourse among nations once more which existed in the later medieval and earlier Renaissance periods.

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